

Policy, Planning, and Research

**WORKING PAPERS**

Financial Policy and Systems

Country Economics Department  
The World Bank  
August 1989  
WPS 248

# **Private Investment, Government Policy, and Foreign Capital in Zimbabwe**

Mansoor Dailami  
and  
Michael Walton

**Policy measures to encourage recovery of private investment in Zimbabwe should focus not on measures to raise current profits but on measures to relieve supply-side constraints, to reduce perceived risk, to clearly define the rules of the game for foreign investors, and to create a more favorable environment for investment decisionmaking.**

The response of private investment is central to the effectiveness of adjustment measures in bringing about structural change and sustained growth — but there is little analysis of this issue for Africa.

In some African countries there is little or no indigenous business sector; in many, foreign corporations play an important role. Zimbabwe's business sector is relatively well-developed by African standards — and since there is a working stock exchange, the accounts of much of it are in the public domain.

This study focused largely on the behavior of this part of the private sector — in the context of overall determinants of private investment.

Dailami and Walton conclude that no simple policy shift will initiate and sustain the recovery of private investment in Zimbabwe. The reasons for weak private investment are complex. Adjustments in conventional areas are unlikely to work when the problem also lies in the overall environment for investment decisionmaking and intangible perceptions of future risk.

The government's current focus on the guidelines for foreign investment is appropriate

and important, but should be cast in a broader context. Policy measures should be geared toward:

- Relaxing supply-side constraints.
- Reducing perceived risks.
- Defining new, clearer rules of the game.
- Facilitating investment decisionmaking.
- Encouraging the underlying demand for expanding capacity.
- Improving incentives for investment to be economically efficient.
- Dealing with the ownership issue.
- Creating a supportive macroeconomic environment.

Together these measures would constitute a radical shift in the business environment — one that need not lead to an unwarranted rise in either the foreign share of profits or the share of foreign capital in the economy.

This paper is a product of the Financial Policy and Systems Division, Country Economics Department, and the Country Operations Division, Southern Africa Department. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Maria Raggambi, room N9-031, extension 61696 (64 pages with charts and tables).

The PPR Working Paper Series disseminates the findings of work under way in the Bank's Policy, Planning, and Research Complex. An objective of the series is to get these findings out quickly, even if presentations are less than fully polished. The findings, interpretations, and conclusions in these papers do not necessarily represent official policy of the Bank.

## Table of Contents

1.	Introduction .....	1
2.	Private Investment in the Macroeconomy .....	4
	The Historical Pattern of Investment .....	4
	Determinants of Private Investment .....	7
	Implications for the Future .....	13
3.	The Structure of Corporate Finance .....	16
	Sources and uses of Funds .....	16
	The Structure of the Financial System .....	21
	Explaining the Pattern of Finance .....	23
	The Future Demand for Debt .....	25
4.	Rates of Return and the Cost of Capital .....	28
	Profitability and the Rate of Return on Capital .....	30
	The Cost of Capital .....	36
5.	The Regulatory Framework for Corporate Investment .....	41
	Foreign Capital and Government Policy:	
	A Strategic Interaction .....	41
	Domestic Investment Regulation and Foreign Exchange	
	Allocation .....	45
6.	Policy Conclusions .....	47
	A. The Macroeconomic and Financial Framework .....	48
	B. Foreign Exchange and Supply-side Constraints .....	50
	C. Investment Appraisal .....	52
	D. Financial Sector Development .....	53
	E. Complementary Regulatory Issues .....	55
	F. Tax Policy .....	56
	G. The Environment for Foreign Investment .....	58
	Annex 1 Derivation of the Cost of Capital .....	61
	References .....	63

The authors wish to thank Bela Balassa, Ajay Chhibber, Alan Gelb, Stewart Kufene, Sam Malaba, Lloyd McKay, Diana Mutangwazi and Wayne Thirsk for comments, and Tony Hawkins and Brian Conheady for work study and data collection, and Vargha Azad and Carl Webber for research assistance.

## Tables

1.1	Corporate Investment Outlays, 1980-87 .....	2
2.1	Results of an Econometric Analysis of the Determinants of Private Investment .....	9
2.2	Projected Investment Requirements for the Mining and Manufacturing Sectors in 1995 .....	14
3.1	Financing Sources of Non-Financial Corporations, 1980-87 .....	17
3.2	Uses of Funds of Non-Financial Corporations, 1980-87 .....	18
3.3	Self-Financing over Fixed Investment Ratios Local and Foreign held Companies .....	18
3.4	Composition of Corporate Business Assets in Selected Countries, 1983 .....	19
3.5	Projected Financing Requirements for Various Investment Expansion Scenarios, 1987-1992 .....	26
4.1	Simulating the Impact of Alternative Investment Incentives on the Required Return on a Project .....	29
4.2	Estimates of Pre-tax Rate of Return on Capital Employed for Local and Foreign Non-financial Corporations, 1980-87 ..	35
4.3	The Distribution of Business Operating Income into its Components 1980-87 .....	35
4.4	Estimates of After-tax Return on Shareholders' Equity for Local and Foreign Non-financial Corporations, 1980-87 ..	37
4.5	The Real Effective Cost of Debt for Local and Foreign Non-financial Corporations, 1980-87 .....	47
6.1	Issues and Policy Areas for Private Investment Recovery .....	47

## Figures

2.1	Real Fixed Investment, 1968-87 .....	5
2.2	Private and Public Fixed Investment .....	5
2.3	The Composition of Private Fixed Investment, 1980-84 .....	6
2.4	The Composition of Public Fixed Investment, 1980-84 .....	6
2.5	Real Change in GNP and Private Fixed Investment .....	11
2.6	Real Private Investment and the Relative Price of investment goods .....	11
3.1	The Ratio of Internal Funds to Fixed Investment in the Corporate Sector .....	20
3.2	Financial Assets of Selected Countries .....	22
4.1	The Industrial Share Price Index, 1975-88 .....	32
4.2	The Real Cost of Capital, Local and Foreign Companies, 1980-87 .....	40
4.3	The Relationship Between the Real Cost and Acquisition Price of Capital, 1980-87 .....	40

## 1. INTRODUCTION

1.1 The continued sluggish behavior of corporate business investment in Zimbabwe is a major source of current concern. With the exception of the short-lived economic boom of the early 1980s, business fixed investment has, since independence, been depressed and has experienced a significant decline over the past few years. This decline has been particularly pronounced in the investment patterns of large companies and among these especially foreign controlled ones (see Table 1.1). Given the dominant role of these companies in the country's total business investment activity, their reluctance to invest has prompted serious concern. At stake is not just the current economic recovery, but also the prospects for future growth in output and employment, and the effectiveness of any structural adjustment measures. Both the Government of Zimbabwe and the business community are keenly aware of the present situation and the implications that it may hold for the future. There is, however, less agreement about the underlying causes about the required policy measures to support an investment recovery.

1.2 The present weakness of investment demand in Zimbabwe is due to a range of socio-political and economic factors, divided broadly into three categories: (i) supply-side factors, related primarily to shortage of foreign exchange necessary for imports of essential capital goods and industrial inputs; (ii) excessive administrative intervention in the areas of investment decision making, labor relations, and price controls; and (iii) socio-political factors reflecting the country's history, strategic location, and political evolution. There is no easy way to disentangle the influence of these factors or to establish their quantitative dimensions. Some of these factors are not amenable to quantification and their influence cannot be assessed within the conventional models of private investment behavior.<sup>1</sup> Yet, their importance is underlined by the fact that conventional indicators of investment incentives, such as profitability, a supportive tax incentive scheme, and the lack of any apparent financial constraint, have been rather favorable in recent years.

---

<sup>1</sup> Analysis of private investment behavior is difficult and controversial, even in ideal situations when the influence of political and strategic factors are not considered. The controversy among various approaches to determinants of private investment in industrial countries, which has persisted in the economic literature over the past fifty years, is one manifestation of the intractability of assessing how investors respond to changes in the underlying economic and financial environment. See for instance, Abel (1980) and Shapiro (1986), for further discussion.

**Table 1.1 Corporate Investment Outlays, 1980-1987**  
(current and 1980 prices)

Year	Total Private Investment		Nominal		Large Corporations <sup>a/</sup>			
	Nominal	Real	Real <sup>b/</sup>		Total	Real <sup>b/</sup>		
			Foreign	Local		Foreign	Local	Total
1980	366	366	75	46	121	75	46	121
1981	593	516	170	47	217	148	41	189
1982	523	397	152	54	206	115	41	156
1983	512	316	66	50	116	40	30	70
1984	649	339	49	9	58	26	5	31
1985	554	240	101	59	160	44	25	69
1986	697	266	172	72	244	66	27	93
1987	700	242	160	108	268	55	37	92

**a/ All 48 Corporations Listed in the Zimbabwe Stock Exchange.**

**b/ Deflated by investment price deflator.**

**Source: Zimbabwe Stock Exchange.**

1.3 A comprehensive view of business investment in Zimbabwe needs to take account of four basic factors: (i) the desire for investment; (ii) the availability of funds to pay for the investment; (iii) the cost of capital, including the influence of the incentive system; and (iv) the regulatory and institutional environment. The desire for investment is related to macro and structural factors that underlie the companies' motives for business expansion, cost reduction or replacement, and renewal of aging and obsolete machinery and equipment. The availability of funds depends on the level of internal cash generation, on the willingness and capacity of firms to raise funds externally, and, of course, on planned investment. The incentive system embraces both the various inducements of tax shields, accelerated depreciation schemes, interventions on interest rates, guaranteed finance that governments resort to in order to stimulate investment expenditures and interventions on resource allocation that also affect the incentive for investment. These interact to affect the cost of capital and so the required rate of return for new investment. These three factors are, to a large extent, complementary to each other. Ample supply of funds and generous incentives would not necessarily lead to higher investment outlays if firms lack motives or reasons for such an expansion. Alternatively, lack of an appropriate incentive system could frustrate the desire for investment, even if finance is not a binding constraint. Finally, the financial constraint could be binding when both desire and incentives are favorable.

1.4 Investment desire, incentives and finance interact within a regulatory and institutional framework. Such a framework defines the ground rules and determines the degree of autonomy that businesses can exercise over the crucial areas of project selection, project approval, labor relations and financing, and dividend policies. Such a degree of

autonomy bears strongly upon the potency of the incentive system. For instance, generous depreciation allowances are less effective if investment decision making and implementation processes are constrained by excessive government intervention.

1.5 This paper assesses the determinants of business investment in Zimbabwe in the four areas outlined above. The quantitative analysis of the corporate sector covers the local and foreign companies that are listed in the Zimbabwe Stock Exchange (ZSE), for which reliable balance sheet and income expenditure data are available for 1980-87. This constitutes a small sample in terms of number (only forty eight companies), but a group that is critical in terms of both share of total business capital formation and economic function. These are generally large companies with an intensive network of production and distribution activities in the mining, manufacturing, construction, and retail sectors. They account in aggregate for slightly more than one-half of the private business investment, and their total capital assets measured at book value amounted at the end of 1987 to about Z\$ 2 billion or 20 percent of GDP.

1.6 The remainder of the paper is divided into five parts: Chapter 2 presents the macro context for private investment and the results of an econometric investigation of determinants of private investment; Chapter 3 analyzes the pattern of corporate finance in Zimbabwe, highlighting the self-financing characteristic of the corporations; Chapter 4 provides an analysis of the present investment incentive system in Zimbabwe, including an analysis of the cost of capital in Zimbabwe; Chapter 5 discusses the regulatory framework for domestic and foreign firms; and Chapter 6 pulls together the conclusions of the analysis for government policy. Finally, Annex I discusses the determination of the marginal cost of capital for the non-financial corporate sector.

## 2. PRIVATE INVESTMENT IN THE MACROECONOMY

### The Historical Pattern of Investment

2.1 The private sector has accounted for half or more of total fixed investment in the past. It has had two principal characteristics: first, it has experienced sharp fluctuations in response to changes in the overall level of economic activity; and second, it has dominated investment in the goods-producing sectors.

2.2 The variation in total fixed investment since 1968 is illustrated in Figure 2.1. There have been two major peaks: in the major expansion of the early 1970s and in the short post-independence boom of 1981-82. There has been a significant subsequent decline--to the real levels prevailing in 1972-73--and only a weak recovery following the agriculture-led expansion in economic output of 1985. Figure 2.2 then gives the breakdown between private and public fixed investment<sup>2</sup>. This reveals that the variations in private investment have been sharper: the decline in private investment started in 1982, before public investment, and the subsequent depression has been deeper, to an investment level below that prevailing in 1970 or 1979, that was the trough of the previous depression. There also appears to have been a shift in the overall composition of investment: the private sector accounted for about 60 percent of the total through 1981 but for less than half subsequently.

2.3 The relatively sharp decline in private investment has implications for the sectoral pattern of investment. As Figures 2.3 and 2.4 show, there are radical differences in the composition of private and public sector investment. The private sector dominates investment in the goods-producing sector: in the 1980-84 period, manufacturing and mining accounted for over half of total private investment and agriculture for a further 15 percent. This represented only minor changes from the composition in the 1970s; it reflects, of course, the predominance of private sector ownership of the capital stock in these sectors. The public sector, by contrast, has mainly invested in economic infrastructure and, to a lesser extent, public services. At least until 1984, the public sector has accounted for a small fraction of total investment in the goods-producing sectors.

2.4 This pattern of a relative predominance of the private sector in the goods-producing sectors suggests these have been particularly adversely affected in the post-1982 investment decline. This is worrisome in view of the critical role of these sectors for future growth. Both government and other analysis has documented how post-independence growth in production has been to a large extent associated with growth in services--with the

---

3/ The Central Statistical office only publishes a breakdown of investment up to 1984: this paper used direct estimates of public investment (from budgetary and parastatal sources) and derived private investment as a residual for 1985-87.



Figure 2.1

Real Fixed Investment, 1968-1987  
(in constant 1980 prices)

Z\$'000

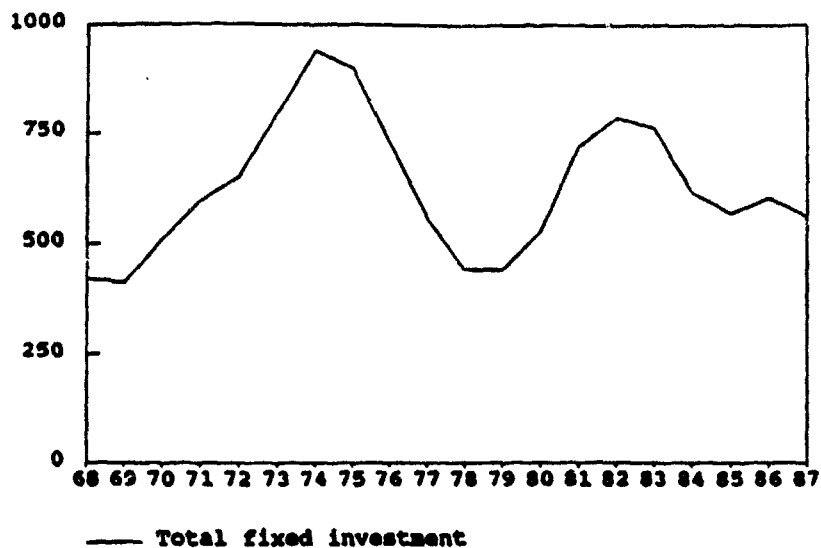


Figure 2.2

Private and Public Fixed Investment, 1970-87  
(in constant 1980 prices)

Z\$'000

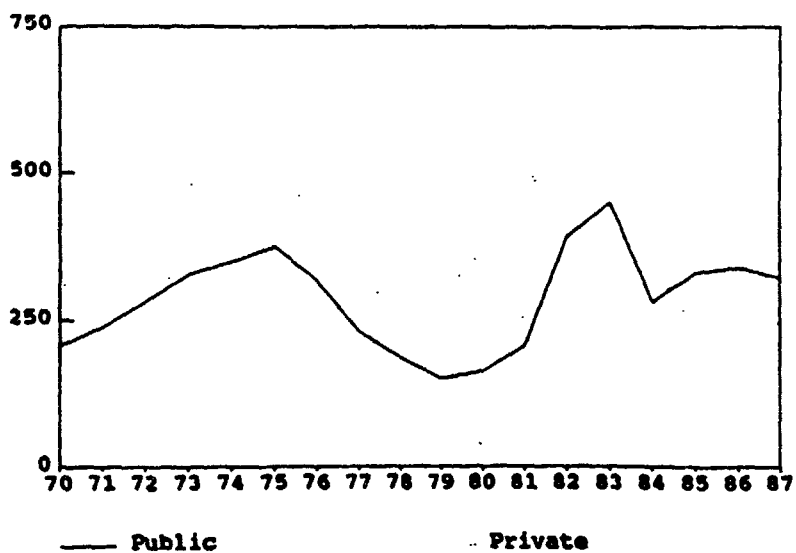


Figure 2.3: The Composition of Private Fixed Investment  
(1980-84)

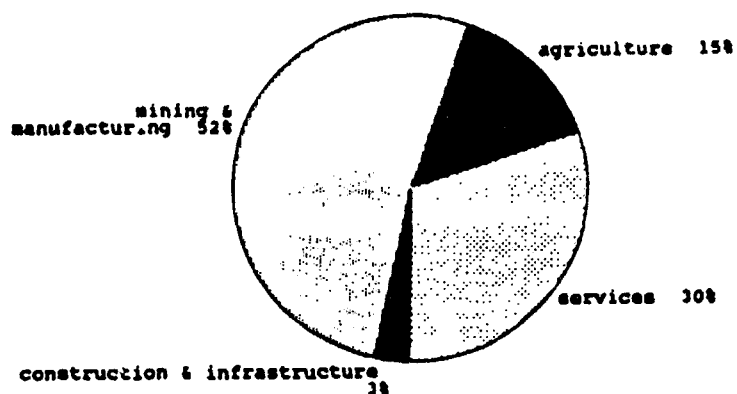
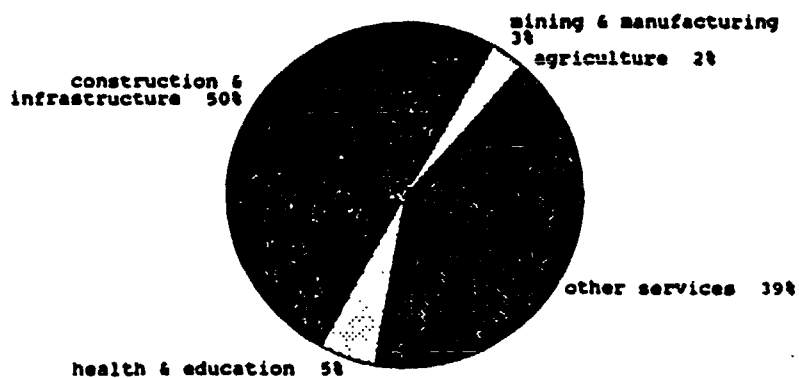


Figure 2.4: The Composition of Public Fixed Investment  
(1980-84)



exception of bumper agricultural years.<sup>3</sup> Inadequate investment levels in the goods-producing sectors, especially in the mid-1980s, further jeopardizes future growth from this source.

2.5 The final descriptive point of importance here concerns the large role of corporations within the private sector in Zimbabwe. The business sector accounts for the bulk of investment in mining, manufacturing, construction and finance, and is also important in trade and transport. In agriculture, commercial farmers and some businesses account for most recorded investment, while the smallholder investment that has occurred has probably largely gone unrecorded. Small-scale and household enterprises play a relatively small role in other sectors, but probably a rising role in the urban informal sector; again it is likely that much of this activity is going unrecorded.

#### Determinants of Private Investment

2.6 To provide the overall context for the behavior of the business sector, the study undertook an econometric analysis of the determinants of private investment for the 1968-87 period. This is essentially an analysis of the relationship between investment and national income, using an extended accelerator model, with the hypothesis that the principal economic determinants of private investment would be expected to lie in three areas: expectations on the requirements for capacity expansion to meet future growth in sales (that would drive the underlying desire for investment); the cost of investing for domestic and foreign investors--including the price of investment goods; and relative price factors that could influence the expected profitability of investing. In addition to these determinants, we also explored possible changes in the environment for foreign investors. This is not a complete model of investment behavior--this would require both dealing with the simultaneity between output and investment determination and a full specification of the supply side. Some supply-side factors were explored in the econometric analysis, and are briefly reported on here, and a more rigorous approach is planned for follow up work.

2.7 The following approach was adopted to the major variables.

(i) Income and capacity. Expected future sales were generally captured by the use of changes in current national income.<sup>4</sup> There is no direct indicator of capacity utilization so this was explored by alternative indirect measures, including constructed indices of overall utilization in the economy--from either the ratio of actual to trend GDP or a derived

---

<sup>4</sup>/ See for example Government of Zimbabwe, (1986).

<sup>4</sup>All the results reported are based on changes in GNP; similar results were obtained when GDP was used. The influence of the external terms of trade --that affect national income--was also explored, but the results were not significant and are not reported.

capital stock series--and total intermediate imports (on the grounds that the short-run output is import-constrained).

(ii) The cost of capital. It is argued in Chapter 3 that the appropriate formula for the cost of capital should take account of three factors--the cost of borrowing, the cost of capital goods and the cost of equity, with risk factors playing a large role in the last. It is also concluded there that the cost of capital is quite different for domestic and foreign investors. It is not possible to construct a long enough time series for the full synthetic estimate of the cost of capital to be used for estimation purposes; however, it was feasible to use measures of the domestic cost of borrowing and of the relative price of investment goods (obtained from the implicit investment deflator in the national accounts) for domestic investors. We then used the yield on long-term bonds in the UK as an indicator of the opportunity cost for foreign investors.<sup>5</sup>

(iii) Relative prices. Two areas of possible influence were explored. First, wages may exert an influence through the indirect impact on profitability; they may also affect the capital intensity of new investment. Second, the real effective exchange rate was explored for the possible influence on the profitability of the tradeable goods sectors (which accounts for a large portion of total private investment as Figure 2.3 showed.)

(iv) Other influences on foreign investors. In addition to the foreign cost of capital, we explored the possible influence of changed expectations on the environment for investment, notably on remittability of profits and dividends, through using dummies for 1980 (for independence and a rise in the level of remittability for most firms) and 1984 (when remittability was cut for pre-1979 investments, with a reportedly broader impact on perceptions of the business environment).

2.8 Table 2.1 provides the results of a number of alternative specifications using ordinary least squares. These are all based on a log-linear investment function--a linear formulation was also explored but with greatly inferior results. The results reveal a highly plausible account of private investment behavior with significant coefficients with the expected signs for most of the major variables. The core of the dynamics lies in the strong relationship between investment and changes in GNP, with a coefficient generally close to 1.8, and lagged investment. The effect of the cost of capital is then of particular interest. The real foreign interest rate, converted into Zimbabwe dollars, is significantly negative,

---

<sup>5</sup>The real rate of return in both British and Zimbabwean currency terms was explored: the former would be relevant for new investment of a British firm and the latter for the re-investment of retained earnings of a firm already in Zimbabwe. The former was insignificant, but the latter highly significant--see below. It would be preferable to use an index of the alternative rate of return on investment--in the UK or in competing countries for the investment for multinationals--we are implicitly assuming well-functioning capital markets in the UK.

Table 2.1 Results of an Econometric Analysis of the Determinants of Private Investment, 1970-1987

Equation	Change in variables related to the cost of capital--								R2	D.W.	
	Constant	log GNP	log GSYUK	log DRR	log RPIQ	log RIR	log REER	log WAGE			log PCFCF1
1. log PCFCF	3.9 (3.6)	1.3 (2.3)	-1.6 (-3.1)						0.3 (1.9)	0.76	1.8
2. log PCFCF	3.1 (3.5)	1.6 (2.8)		-1.3 (-2.9)					0.5 (3.3)	0.75	2.2
3. log PCFCF	3.1 (3.7)	1.9 (3.2)		-1.4 (-3.2)		-1.1 (-1.4)			0.5 (3.3)	0.77	2.1
4. log PCFCF	3.3 (4.0)	1.6 (3.2)		-1.1 (-2.4)	-0.4 (-1.5)	-1.3 (-1.7)			0.4 (3.2)	0.79	2.1
5. log PCFCF	2.7 (1.5)	1.3 (2.2)	-1.5 (-2.8)				0.3 (0.8)		0.3 (1.7)	0.76	2.0
6. log PCFCF	3.9 (2.6)	1.5 (2.4)	-1.1 (-1.7)					-0.2 (-1.6)	0.4 (2.1)	0.77	2.0

## Notes

T-statistics are given in parentheses.

PCFCF = Private gross fixed capital formation deflated by the investment deflator

GNP = GNP deflated by GNP deflator

GSYUK = Real long term government bond yield in UK adjusted for the change in £/\$/Pound Exchange rate.

The nominal rate is deflated by GNP deflator and is calculated by the formula  $1 + \text{GSYUK} / 1 + \text{GNPDEF}$

DRR = Differential rate between government bond yield in UK adjusted for the change in £/\$/Pound exchange rate and internal rate.

It has been entered in the form  $(1 + \text{DRR})$

RPIQ = Relative price of capital goods = Investment deflator/GNP deflator

RIR = Real interest rate; The nominal interest rate deflated by the CPI, calculated by the formula  $1 + r / 1 + \text{cpi}$

REER = real effective exchange rate

WAGE = Real wage; nominal wage deflated by GNP deflator

PCFCF1 = Lagged dependent variable (one period)

as is the relative price of capital goods, while the domestic interest rate has the right (negative) sign but is generally insignificant. This is consistent with the view that there are two groups of investors within Zimbabwe: foreign-controlled firms are influenced by perceptions of the opportunity cost of investment as measured here by the U.K. interest rate. Quite good results were also obtained using the difference between the U.K. interest rate (exchange rate adjusted) and the domestic interest rate. (The fact that surplus profits cannot be expatriated in the short run makes no difference to the argument, since this will still provide a measure of the perceived future cost of a long-term investment decision). However, neither foreign nor domestic firms borrow significantly domestically to finance investment (see Chapter 3) and the domestic interest rate is only of weak significance. The relative price of capital goods is, on the other hand, an important variable for all investors--this is further analyzed in the assessment of the cost of capital in Chapter 4 and Annex 1.

2.9 Both the real wage and the real exchange rate were generally insignificant (including in formulations with lags). This is probably a reflection of the dominance of quantitative controls and regulations in these areas, though, to the extent the exchange rate influences exports it would be expected to have an indirect influence on investment through an increased supply of imports. These results remain useful, since they indicate that the Government does not need to be too concerned about the consequences for investment of changes in these variable to meet other objectives. There is some uncertainty over the exchange rate since this would be expected to influence the relative price of investment, in view of the relatively high import content of investment.<sup>6</sup> However, historically the effect of changes in import prices appear to have been swamped by other determinants of this relative price--that we hypothesize are associated with restrictions on supply. Thus if exchange rate depreciation were associated with increased availabilities of capital goods, any adverse price effects should be moderated or reversed. It would, of course, be important to monitor this.

2.10 Finally, the use of dummies for changes in the business environment in 1980 and 1984 had no significant impact--an interesting result that suggests neither a sharp break in the behavior of the private sector at independence, nor any major effect on investment of the changes in the level of remittability in these years. (That does not mean that variations in remittability are unimportant--it is argued in Chapters 5 and 6 that they are--only that the specific changes did not have an additional short-run impact).

2.11 Two of the main relationships are illustrated further in Figures 2.5 and 2.6. The first clearly shows why the coefficient on income is high--in the two major cycles that occurred in the period in question, private investment has fluctuated sharply in response to changes in

---

<sup>6</sup>Fixed investment has, on average, an import content of about 40 percent compared with about 20 percent for other expenditures.

Figure 2.5

Real Change in GNP and Private Fixed Investment  
(in percent at 1980 prices)

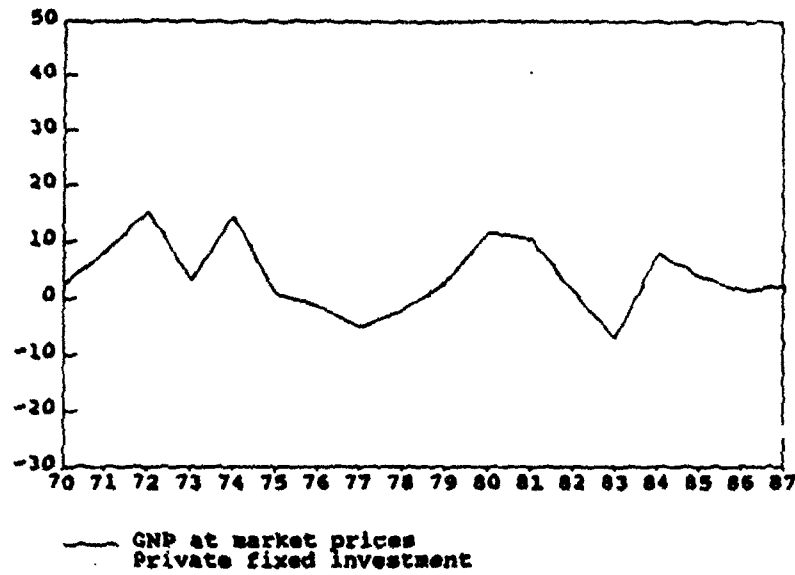
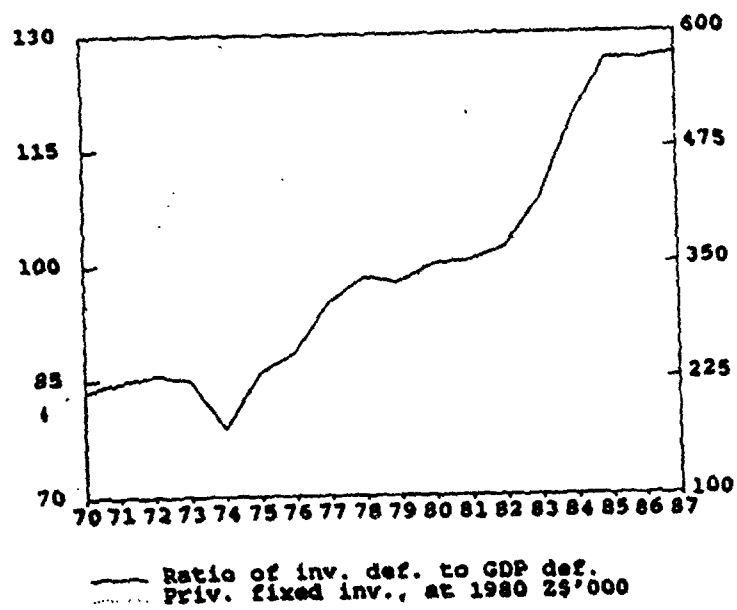


Figure 2.6

Real Private Investment and the Relative  
Price of Investment Goods



national income. As we know from previous analysis on the economy, this is in part because total, and especially private, investment has characteristically borne the brunt of adjustment when the emergence of macroeconomic imbalances or external liquidity constraints have forced the Government to make macroeconomic corrections. This implies the econometric results cannot be interpreted as a simple demand relationship. On the supply side, the adjustment has generally been effected through cutbacks in import allocations for investment, rather than any squeeze via the financial system. Conversely, in the two major upswings--of the early 1970s and the beginning of the 1980s, there has been both a need to catch up with previously postponed investment and a relatively large relaxation in the import constraint. It should be noted that in both cases it is reasonable to suppose the recovery in output was expected to be sustained--in the early 1970s because of the strength and extent of the period of growth, and in the early 1980s because of the strong general improvement in expectations after independence. The stock market index reached a record high in 1980 (see Figure 4.1). By contrast, the short-lived recovery in 1985 was entirely due to an excellent harvest and was associated with only a moderate and temporary recovery in investment.

2.12 Figure 2.6 then shows the rise in the relative price of investment: here the two periods of sharp increase, in the late 1970s and the mid-1980s, coincide with periods of contraction of private investment. While some secular rise in the relative price of capital goods may occur over the long term, this is an unusually large and rapid increase. <sup>7/</sup> As noted above, the most plausible explanation in the Zimbabwean context is that restrictions in the supply of capital goods (effected by tightened import rationing) have been reflected in their relative price. This account is consistent with the workings of the price control system, that is based on allowable mark-ups for most products--such a system is much more effective in moderating price increases for relatively homogeneous commodities and very difficult for engineering products.

2.13 Supply-side factors. As noted above, the supply side was not rigorously treated, but we did explore the influence of import variables. The principal supply-side constraint in the system--as everybody in Zimbabwe emphasizes--is the rationing of imported capital goods within the administrative allocation system. This was also explored as an independent

---

<sup>7/</sup> As noted in para. 2.9 this is not due to real exchange rate movements--the relative price of investment rose much more rapidly than the average border price of imports of manufactures in domestic currency. Note that the econometric results should be treated with caution, since the investment deflator is also the index used to deflate nominal private investment. For this reason, we systematically explored the influence of other variables with the relative price of investment excluded.



variable. 8/ Both imports of capital goods (a proxy for government allocations under the foreign exchange allocation system) and indicators of the overall level of foreign exchange availability added slightly to the overall explanatory power of the equations, with a marginally significant positive impact on private investment. As noted in footnote 9, it is unconventional to treat this as an exogenous factor, but this is justified in Zimbabwe because of the import rationing system: the Government decides on the foreign exchange allocation for this purpose. While it is probably only "weakly" exogenous (i.e., policy decisions will be influenced by other factors, including changes in income) it is appropriate to have it as an independent variable. It is actually surprising that it has as little explanatory power as indicated in the equations, but there are two important interpretations of this: first, the resultant scarcity in capital goods is already partially captured in their relative price; and, second, despite the obsession with import rationing within Zimbabwe other factors--sales expectations, business confidence and the cost of capital--are of equal or greater importance for the level of private investment. The latter point is a major theme of this paper.

#### Implications for the Future

2.14 The results reported above are quite good in econometric terms and they support the view of a private sector that responds to underlying economic variables. The overall explanatory power of the equations is surprisingly high in view of the evidence from firms on the importance of other factors on investment--including perceived risks and regulations. However, this is consistent with the absence of major changes in these structural aspects of the business environment over the period; the negative results on the tests for changes at independence, and the highly significant constant term, also support this conclusion. Although valuable, the results should be treated with caution for any forward-looking analysis. Apart from the customary caveats with the results of an analysis with limited data, it was suggested that the strength of the relationship between private investment and national income derives in part because of the nature of the cycle and macroeconomic adjustment process. It would be foolhardy either to predict that a rise in GDP alone would lead to a sustained rise in investment of the strength indicated by the equation results, or that cuts in the relative price in investment goods would have a similar effect. The private business sector's investment behavior is (unfortunately) much more complex than that, and the Government will have to deal with a range of other factors in supporting an investment recovery. Indeed, much of the remainder of the report is devoted to a more detailed account both of some of the key factors influencing the explanatory variables in the estimated equations (for example the financial

---

8/ This is, of course, the opposite of the normal direction of causation, in which the demand for imported goods would be treated as a function of the level of investment demand and the relative price of imported and domestically produced capital goods (to the extent that these are competing products).

and cost of capital variables) and to some of the factors that this approach cannot capture (notably in the areas of risks and regulations).

2.15 To provide the context for the required role for private sector investment in future growth, we undertook an indicative analysis of investment requirements up to the mid-1990s, based on plausible targets for growth in output and estimated investment requirements for replacement and new investment. It is limited to the key mining and manufacturing sectors and, for simplicity, a constant degree of capital efficiency is assumed. As Table 2.2 shows, if the mining and manufacturing sectors are to grow by 2.9 percent per annum and 4.6 percent per annum through the mid-1990s <sup>2/</sup> investment levels in the combined sectors have to rise to 74 percent above the 1981 peak and to over 200 percent above the 1984 level (that was probably above the 1987 level for these sectors). While the assumptions are subject to a range of errors, and some reductions in investment requirements would occur with productivity increases, there is clearly a need for a major rise in private investment.

Table 2.2 Projected Investment Requirements for the Mining and Manufacturing Sectors in 1995

	Growth in output 1987-95 (% p.a.)	Assumptions		Results	
		Depreciation rate (%)	Capital output ratio <sup>a/</sup>	Increase in real investment by 1995 relative to 1981 1984 (.....%.....)	
Mining	2.9	5.0	4.4	40	246
Manufacturing	4.6	5.0	2.4	100	191
Total	n.a.	n.a.	n.a.	74	206

<sup>a/</sup> Derived from a historical aggregate capital stock series calculated for the 1987 CEM distributed across sectors according to total investment levels.

Source: World Bank staff projections.

2.16 The result is of importance for the private sector because of its predominance in these sectors. It was suggested above that there is considerable uncertainty over the future growth in private investment. A mechanistic use of the estimation results for forecasting could predict a quite rapid recovery in investment following an output recovery, especially if this were also associated with a decline in the relative price of capital goods. But there are a number of reasons for not being optimistic about the responsiveness of private investment, especially since the only significant rise in private investment in the post-independence period quickly petered out in response to worsened macroeconomic conditions. The

<sup>10/</sup> These happen to be the growth rates from the latest projection we have done in an accounting (RMSM-type) model--they are consistent with the maintenance of external balance.

subsequent depression in investment has been deep and there has been very little new foreign investment inflows by either new or established foreign investors. If the endogenous private sector response is weak, this implies that one of two courses will be necessary if capital is not to constitute a brake on future growth in these sectors. Either other measures will have to be implemented to change the relationship between private investment and macroeconomic conditions or the public sector will have to play a much larger role in investment in these sectors. The latter course brings risks of less efficient resource use, a further worsening in the public sector's resource position and potential negative influence on private sector investment. This warrants further analysis, but is not the focus of attention of this paper. The main interest here lies in examining potential areas for getting private investment going, based on an assessment of the current situation. The following sections turn to an account of the financial, incentive and regulatory framework for domestic and foreign corporate investment.

### 3. THE STRUCTURE OF ZIMBABWEAN CORPORATE FINANCE

3.1 This chapter turns to the first specific area of potential importance in determining current and future investment levels--the pattern of corporate finance. This is of importance to an understanding of the extent to which financing constraints are important influences on investment behavior, of the relations between the corporate sector and the financial system, and the implications for future financial sector development and policy. It starts with an analysis of the sources and uses of funds, then discusses the reasons for the high degree of self-financing and concludes with projections of the future demand for debt.

#### Sources and Uses of Funds

3.2 A high degree of self-financing is a central feature of corporate finance in Zimbabwe. Corporations generally rely on internal sources of funds, consisting of retained earnings and capital consumption allowances, for the bulk of their financing requirements. The composition of sources of funds is shown for listed companies in Table 3.1. <sup>10/</sup> Between 1980 and 1987 company retained earnings and depreciation allowances accounted for 60 percent of the total sources of funds. Issuance of new shares has accounted for eight percent of total sources for the period as a whole, but its contribution has been erratic, often reflecting the funding behavior of only one large company. Most notable has been the very low contribution of debt capital. Public issuance of corporate bonds has been virtually non-existent (though reportedly long-term borrowings do occur on a private placement basis), and recourse to bank borrowing has amounted to only 13 percent of total companies' needs for funds. The remaining 16 percent of sources of funds has been met through trade credits.

---

<sup>10/</sup> This is derived from flow of funds and balance sheet data for the listed companies on the Zimbabwe Stock Exchange. For the non-listed companies, there exists no comparable information. These companies are not legally obligated to publish income-expenditure and balance sheet data. Indirect evidence, based on field interviews and the low ratio of total credit to investment in Zimbabwe, suggests that self-financing is high in these companies as well.

**Table 3.1 Financing Sources of Non-Financial Corporations**  
**1980-1987**  
 (percentage of total sources of funds)

	Average 1980-1987	1980	1981	1982	1983	1984	1985	1986	1987
Gross Internal Funds	59.2	54.0	40.1	40.9	50.9	87.5	82.6	53.6	74.1
Retained Earnings	37.0	37.8	28.2	20.0	10.9	35.4	54.3	37.6	53.9
Depreciation	22.2	16.2	12.0	20.9	40.1	52.1	28.3	16.1	20.2
New Stock Issues	8.3	26.6	10.8	0.6	9.4	6.4	0.5	1.2	14.7
Medium/Long Term Loans	3.2	-1.0	14.0	32.4	4.4	-3.6	-13.7	-0.2	-7.2
Short Term Loans	9.6	2.2	13.4	8.3	18.7	-28.9	6.6	27.3	4.7
Trade Credits	17.5	16.5	17.5	17.1	12.5	37.0	19.2	16.5	13.9
Other Sources	2.1	1.7	4.1	0.7	4.1	1.7	4.8	1.6	-0.2

Source: All 48 corporations listed in the Zimbabwe Stock Exchange (ZSE).

3.3 Table 3.2 then provides a breakdown of the uses of funds for listed companies over the 1980-1987 period. These companies have, in the aggregate, used over half of their resources on investment in fixed assets. Roughly one-quarter has been used to finance debtor accounts or to finance long-term financial investment. This ratio of fixed assets is much larger than in other developing countries and is strikingly close to the pattern observed in industrialized countries, particularly the U.S. and the U.K. (See Table 3.4). Despite the large share of fixed assets in the uses of funds, the degree of self-financing is even more striking in relation to fixed investment. As Table 3.3 and Figure 3.1 show, internal sources of funds were equivalent to over 100 percent of fixed investment in the 1980s for both local and foreign controlled companies. This suggests that, as far as fixed investment has been concerned, the listed companies would have been more than able to meet their own financing needs, with no dependence on financial intermediaries. Firm interviews confirm that external finance is little used for fixed investment and predominantly for the companies' operating requirements, including funds for working capital to pay for stocks and work in progress, financing trade debtors and for holding cash and other liquid assets.

**Table 3.2 Uses of Funds of Non-Financial Corporations**  
**1980-1987**  
 (percentage of total uses of funds)

	Average 1980-1987	1980	1981	1982	1983	1984	1985	1986	1987
Capital Formation	77.4	74.3	78.7	91.6	88.7	52.6	74.9	72.4	78.8
Fixed Investment	53.1	46.1	55.3	62.8	79.4	56.2	48.7	39.4	53.2
Inventories	24.4	28.3	23.4	28.8	9.3	-3.6	26.2	33.0	25.6
Cash	0.8	-1.9	0.1	-4.2	-4.8	13.5	5.0	2.2	-0.1
Debtor	18.0	20.1	16.7	10.9	13.0	31.1	12.5	23.1	18.8
Long Term Loans and Investments	0.5	1.0	1.6	0.6	-0.4	1.3	1.0	-0.3	-0.1
Other Uses	3.3	6.4	3.0	1.1	3.5	1.4	6.5	2.6	2.5

Source: All 48 corporations listed in the ZSE.

**Table 3.3 Self-Financing over Fixed Investment Ratios**  
**Local and Foreign held Companies**  
 (percentage per annum)

Year	Internal Funds	<u>Local Companies</u>	Internal Funds	<u>Foreign Companies</u>
		Internal Funds and New Stock Issues		Internal Funds and New Stock Issues
1980	90.1	118.5	133.9	206.2
1981	76.4	121.3	71.6	82.8
1982	69.8	70.6	63.2	64.3
1983	41.7	70.0	78.6	79.7
1984	94.7	126.4	183.5	185.5
1985	89.5	92.0	225.6	225.4
1986	124.9	133.5	141.5	141.8
1987	101.4	110.1	165.9	206.8

Source: All 48 corporations listed in the ZSE.

**Table 3.4 Composition of Corporate Business Assets in Selected Countries, 1983**  
(percentage of total assets)

	Columbia 1/	Germany 2/	India 3/	Japan 2/	Korea 4/	Turkey 5/	U.K. 2/	USA 2/	Zimbabwe 6/
1. Fixed Assets a/	32.24	32.38	41.75	27.19	39.62	34.90	41.76	61.00	55.85
2. Inventories b/	15.38	21.18	29.97	14.01	17.72	19.80	20.39	14.62	23.15
3. Accounts Receivable c/	26.02	29.99 f/	20.46	36.81	16.57	24.16	23.37	13.58	14.28
4. Liquid Assets d/	6.48	4.01	6.31	13.32	10.93	5.72	7.13	5.59	2.49
5. Other Assets e/	19.88	12.44	1.51	8.67	15.16	15.42	7.35	5.21	4.61
6. Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

a/ Net of accumulated depreciation.

b/ Work in progress and raw materials.

c/ Trade and other account receivable.

d/ Cash, bank deposits and marketable securities.

e/ Includes investments and other deposits.

f/ Includes short term bills and bonds.

Source: 1/ Superintendencia de Sociedades. Boletín Estadístico No. 6, 1983.

2/ OECD Financial Statistics Part 3, 1986.

Non Financial Corporations in Germany, Japan (total sample), U.K. (large companies in all industries) and U.S.A.

3/ Reserve Bank of India Bulletin, 1986.

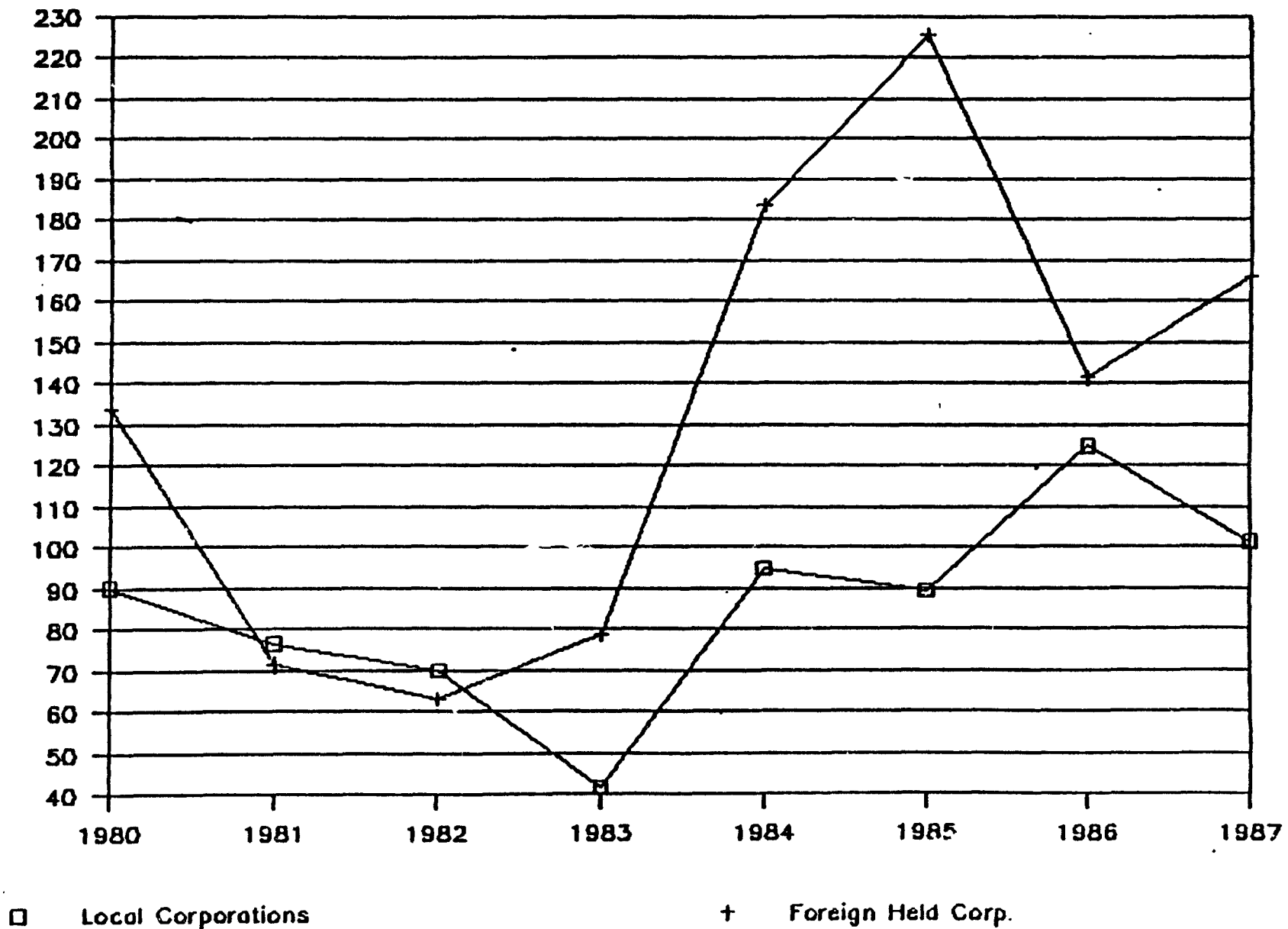
4/ Bank of Korea, Financial Statement Analysis, 1983.

5/ Industrial Development Bank, 1987. Consolidated balance sheets of 185 companies.

6/ Based on the 48 listed Companies in the Zimbabwe Stock Exchange, 1988.

Figure 3.1

The Ratio of Internal Funds to Fixed Investment in the Corporate Sector





3.4 The similarity on the asset side of corporate balance sheets between Zimbabwean and British companies extends also to the liability side. It is a well known feature of British corporate finance that companies rely heavily on internal sources of funds. Gross internal funds accounted over the period 1970-1985 for about 70 percent of total sources of funds. <sup>11/</sup> Furthermore, in terms of financing of fixed investment, the non-financial corporate sector has been completely self-financed. In the words of one expert, "in terms of financing of physical investment, the non-financial corporate sector could have been floated off separately from the financial corporate sector, with no net consequence for corporate investment." <sup>12/</sup> Such a degree of similarity in the pattern of corporate financing between Zimbabwe and the United Kingdom is not surprising. Apart from the strong historical linkages and influences, a majority of foreign-controlled companies are subsidiaries of British-based multinationals (or South African companies with British traditions).

#### The Structure of the Financial System

3.5 A high degree of self-finance might be expected to be associated with a relatively weakly developed financial system, especially at the long end of the market. The opposite is true. Zimbabwe has an unusually deep financial sector in terms of the range of financial institutions and, in particular, a high proportion of long-term assets and liabilities. The British influence is again strong: the commercial banking sector is dominated by the presence of branches or subsidiaries of British banks. There are also important similarities in the structure of financial intermediaries and capital markets. In both countries, institutional investors, notably insurance companies, are dominant players in financial intermediation. Also, in both countries, bond markets are characterized by the exclusive role of the public sector and the conspicuous absence of the corporate sector.

3.6 These ties and similarities cannot, of course, be stretched too far. There are important differences in Zimbabwean industrial structure, degree of financial intermediation, size and role of equity markets, to mention only a few. Yet, this degree of similarity observed in the financial structure and in the pattern of corporate finance serves to provide a useful point of reference and to underline the relative sophistication of the financial intermediary system in Zimbabwe. Compared to many developing countries, Zimbabwe has a highly sophisticated financial intermediary system with a broadly based institutional structure spanning over banks, finance companies, pension funds and insurance companies. In terms of the overall degree of intermediation, the country's financial system is comparable with the average performance of middle-income

---

<sup>11/</sup> See C. Mayer, "New Issues in Corporate Finance," *European Economic Review*, 1988, pp. 1167-1189.

<sup>12/</sup> *ibid*, p. 1172.

Figure 3.2

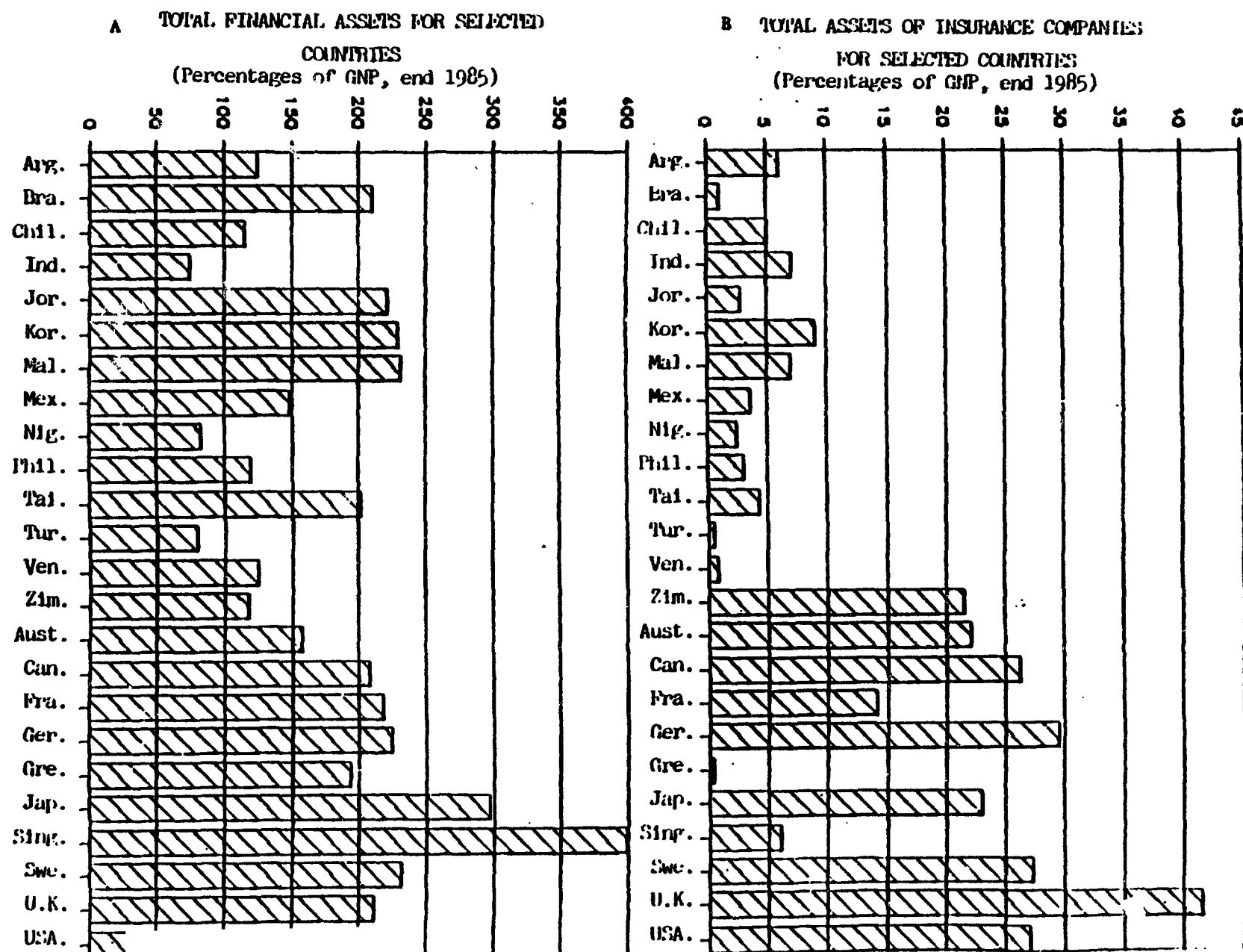


Figure 3.2  
Financial Assets of Selected Countries

developing countries, but its capacity to supply long-term capital, as exemplified by the important role of institutional investors and the depth of the country's capital market, places Zimbabwe ahead of many countries, including Chile, Korea, India, Singapore, and Greece <sup>13/</sup> (see Figure 3.2).

3.7 What is this sophisticated financial system doing if it is not lending much long-term capital to the corporate sector? A dominant function, especially since the mid-1980s, is doing a very effective job of intermediating between the private and public sectors. Private corporate and household savings are captured in a range of financial assets, including commercial bank deposits, post office savings accounts and pensions and life insurance. Much of this is onlent to the public sector, most notably in the form of short-term loans (that are automatically rolled over) to the Agricultural Marketing Authority and medium to long-term public bonds. This is facilitated by a range of required assets requirements that effectively channel the resources into these public liabilities. It should be emphasized, however, that there is little evidence of direct crowding out of the private business sector, owing to its weak demand for credit in this period. In addition the financial system already plays a major role in three important areas for the private sector. First, it provides a range of services related to short-run finance of the corporate sector: indeed, the unusually low proportion of the assets of corporations in debtor accounts is probably a direct reflection of the efficiency of the banking sector. Second, there has been continued (and worrying) growth in credit to the private farming sector, with commercial farmers having the dominant share in indebtedness. While other parts of the private sector were reluctant to borrow and able to avoid this, farmers, appeared to have had no choice. Third, there has been both growth and diversification in private housing finance, with lending by the building societies for low-cost housing of rising significance.

#### Explaining the Pattern of Finance

3.8 What causes corporations in Zimbabwe to depend to such a large extent on internally generated source of funds to finance their fixed capital formation and so little on debt financing? To the extent that the cost of debt financing falls below the rate of return on invested capital, there would appear to be good reason for companies to increase leverage. This has been the case in Zimbabwe since 1980, at least, if the cost of debt financing is narrowly defined to refer only to interest charges. Return on capital employed (net of depreciation) has averaged 15.8 percent over 1980-1987, as compared to interest rates for the corporate sector slightly above the minimum lending rate of 13 percent (compared with an average of 10.3 percent on bank certificates of deposit in the 1980s, and 13 percent on government 25-year bonds). Add to this the tax deductibility of interest payments and the effective cost of debt finance drops to around

---

<sup>13/</sup> The total assets of insurance companies in Zimbabwe in relation to GNP was in 1985 21.5% compared to a corresponding figure of 9.1% in Korea, 6.9% in Malaysia, and 5.17% in Chile.

seven percent creating a large positive differential between company profitability and the interest rate.

3.9 The preference for internal funding in the face of the apparent economic advantages of debt finance is not unusual, but is a well-established feature of developed corporate sectors world-wide. Given their needs for funds, corporations are generally known to resort first to internally generated sources of finance, then to debt, and lastly to issuance of new stocks. This financing order, which is referred to in the literature as the "pecking order," has an economic and practical rationale; it reflects both the comparative advantage of availability and lack of any associated direct cost that internal finance offers, and also a general reluctance on the part of management to go outside for funds, with the associate reduction of control. 14/

3.10 The extent to which internal finance predominates then depends, of course, on the availability of internal finance and the level of demand for funds for both fixed assets and alternative uses. Here the Zimbabwean corporate sector is distinctive. On the availabilities side there are two factors. The sector is both reasonably profitable, as we'll see in the next chapter, and it enjoys generous depreciation allowances. These tax shields, earmarked under prevailing tax codes to compensate for the portion of fixed assets which are used up during the process of production, constitute important and often stable and predictable sources of internal funds in many countries. The higher these allowances, the lower the incentive to draw on the tax benefits of debt financing. 15/ Zimbabwean firms can enjoy the full expensing provision permitted under the Special Initial Allowance (SIA), which has been in effect since April 1977. For a large set of assets, including plant and machinery, vehicles, and the industrial buildings constructed by the company, the allowances permit full deduction of the cost of assets in the year of purchase. 16/

3.11 There are also low requirements for finance because of demand factors. We saw that the Zimbabwean corporate sector has relatively low requirements for its operating needs--probably a reflection of the efficiency of this part of the financial system. On top of this is the

---

14/ This preference of corporations to resort to internal sources of finance was first elaborated and empirically documented in the context of the United States economy by Gordon Donaldson (1961). Recent research by S. Myers (1984) and Majluf (1984) have provided strong theoretical rationale for this hypothesis.

15/ For a theoretical discussion of the substitution between non-debt related tax shields with debt related tax shields see De Angelo and Masulis (1980), and for empirical evidence, see, Titman and Wessels (1988).

16/ See Chelliah et al (1986) Report of the Commission of Inquiry into Taxation.

fundamental factor in the mid-1980s of the depressed state of fixed investment demand. With this state of demand for fixed investment, companies have had no reason to borrow, irrespective of the existing strong incentives in favor of debt. In other words, the answer to the above question--why have companies relied so much on internal resources?--lies in the combination of a preferred "pecking order" in sources of finance and a lack of growth on the demand side. To see the quantitative logic of this argument, it is only necessary to understand the dynamics of asset accumulation of a purely self-financing firm, which in the tax environment of Zimbabwean economy, is determined by one basic parameter: the rate of the firm's operating profits. If it is considered that operating profits, before taxes and interest in the corporate sector of the Zimbabwean economy averaged approximately 15.8 percent of total capital employed <sup>17/</sup> over the 1980-1987 period, and corporate income taxes averaged roughly 27 percent of operating income, it follows directly that the highest rate of growth in total capital that could have been achieved under a self-financing strategy (i.e. if firms paid no dividends or interest) would have been about 11.5 percent per year. <sup>18/</sup> This is equal to almost 80 percent of the actual rate of growth achieved during that period.

#### The Future Demand for Debt Finance

3.12 What are the implications for the future? To assess the interaction between growth and demand for debt capital, it is necessary to expand the scope of the analysis to incorporate the influence of firms' dividend policy and various provisions regarding interest payments and capital consumption allowances. This is illustrated in Table 3.5, which shows the projected increase in demand for loans for both local and foreign-controlled companies, under three alternative scenarios of fixed investment expansion: 15 percent, 20 percent, and 25 percent per year. Under the lowest case scenario, the local companies' aggregate debt to capital ratio increases from 33 percent in 1987 to 70 percent in 1992. For foreign-controlled companies, the rise in aggregate leverage ratio is more modest, from 17 percent in 1987 to 32 percent in 1992. In the second scenario, when investment is assumed to grow at an annual rate of 20 percent, corporate debt increases, by 1992, to reach levels of 73 percent and 36 percent for local and foreign companies respectively. With fixed investment growing at an annual rate of 25 percent, the corresponding rise in leverage ratios is 76 percent and 40 percent.

---

<sup>17/</sup> Capital is defined as fixed assets plus inventories.

<sup>18/</sup> The average 27 percent measures the effective corporate income tax rate. This is (as will be explained below) much lower than the 52 percent average statutory tax rate.

**Table 3.5 Projected Financing Requirements for Various Investment Expansion Scenarios, 1987-1992 a/**

	Average 1987	1988	1989	1990	1991	1992
<b>1. Investment Growth Rate: 15%</b>						
<b>A. Increase in Company Debt b/ (Percentages)</b>						
a1. Foreign	(19.6)	14.1	17.9	20.6	22.2	23.0
a2. Local	7.8	31.5	28.7	26.6	24.9	23.5
a3. Total	(8.8)	22.3	23.4	23.8	23.7	23.3
<b>B. Leverage Ratio c/</b>						
b1. Foreign	0.17	0.19	0.21	0.24	0.28	0.32
b2. Local	0.33	0.41	0.48	0.55	0.63	0.70
b3. Total	0.22	0.26	0.30	0.35	0.40	0.46
<b>2. Investment Growth Rate: 20%</b>						
<b>A. Increase in Company Debt b/ (Percentages)</b>						
a1. Foreign	(19.6)	16.1	21.6	25.4	27.5	28.4
a2. Local	7.8	33.3	31.5	29.9	28.5	27.3
a3. Total	(8.8)	24.2	26.6	27.8	28.1	27.9
<b>B. Leverage Ratio c/</b>						
b1. Foreign	0.17	0.19	0.22	0.26	0.31	0.36
b2. Local	0.33	0.41	0.49	0.57	0.65	0.73
b3. Total	0.22	0.22	0.31	0.37	0.43	0.49
<b>3. Investment Growth Rate: 25%</b>						
<b>A. Increase in Company Debt b/ (Percentages)</b>						
a1. Foreign	(19.6)	18.1	25.4	30.2	32.8	33.7
a2. Local	7.8	35.1	34.4	33.4	32.3	31.3
a3. Total	(8.8)	26.1	29.9	31.9	32.5	32.4
<b>B. Leverage Ratio c/</b>						
b1. Foreign	0.17	0.19	0.23	0.28	0.33	0.40
b2. Local	0.33	0.41	0.50	0.59	0.68	0.76
b3. Total	0.22	0.25	0.32	0.38	0.46	0.53

a/ Model simulation, using following parameter values:

- (i) dividend payout ratio: 25% foreign companies and 50% local companies.
- (ii) effective corporate income tax rate of 51.75%.
- (iii) constant interest rate of 14.14% for local companies and 12.33% for foreign companies.

b/ Short term and long term debt.

c/ Ratio of total outstanding debt to total capital employed.

3.13 Even under the higher growth scenario, these ratios are quite reasonable by the standards of other developing countries, and are comparable to the observed ratios in Colombia and Korea, for example. However they have important implications in three areas.

(i) The pattern of credit growth. If the corporate sector is to have a much larger role in credit demand this will have major implications for monetary management and the affordable level of domestic finance of the fiscal deficit in order to avoid major pressures on the financial system (and on the overall equilibrium of the economy).

(ii) The development of the capital market. As noted above, the capital market is largely oriented toward government bond finance. This is fine as long as there is little demand for investment finance from the corporate sector, but if there is to be an institutional shift toward increased use of the financial system, much greater reliance on the capital market would be desirable. Apart from allowing a greater quantitative allocation of resources to the corporate sector (i.e. less channelling of long-term money into government stock) there is a need to both encourage greater use of the stock exchange and a corporate debenture market.

(iii) Regulations of borrowing. For most foreign companies, these levels of debt would exceed current limits on domestic borrowing and so would only be consistent with current regulations if the companies concerned significantly increased foreign borrowing for the foreign exchange content of investment.

These questions are taken up in the policy conclusions.

#### 4. RATES OF RETURN AND THE COST OF CAPITAL

4.1 If macroeconomic conditions provide the basis for an underlying demand for replacement and expansion in capital then the decision to invest will depend on the relationship between the rate of return and the cost of capital. Both of these are influenced by the pattern of specific incentives for investment and other factors in the economic environment, of which factors affecting perceived risks are of particular importance for the corporate sector. In the end, private investors will compare the expected rate of return on a potential project with the marginal cost of capital. It was not the objective of this report to look into possible rates of return on new projects--that is the job of the private sector. The focus is rather on two questions: have historical rates of return between unusually low in the private sector? and what are the principal influences on the cost of capital, and how are these affected by policies? In this report we used historical evidence on the rate of return on capital and the various factors influencing the cost of capital (of which the interest rate is only one component) to examine these questions.

4.2 Incentives for investment. We start with an illustration using a simplified example to capture some of the key factors affecting the investment decision, including specific incentives. Investment incentives refer to the inducements offered by governments through various tax shields, accelerated depreciation schemes, investment tax credits and risk-sharing arrangements aimed at encouraging companies to undertake projects that they otherwise would not have undertaken. Investment incentives can be viewed as catalysts serving to increase the supply of projects that are economically viable or that meet the corporations' investment criteria; <sup>19/</sup> such supply can be enhanced by lowering the hurdle rate that projects must pass in order to be considered economically viable. To illustrate this point, it is useful to refer to a numerical example. Consider a company that contemplates investing in a project costing \$1,000 and operates under the conditions defined by the following parameters:

- |  |       |
|--|-------|
| (1) Required real rate of return on shareholder's equity | - 8%  |
| (2) Corporate income tax rate                            | - 50% |
| (3) Nominal rate of interest                             | - 14% |
| (4) Rate of inflation                                    | - 10% |
| (5) Rate of economic depreciation                        | - 5%  |

---

<sup>19/</sup> The implicit assumption here is that firms do have the desire to invest, but their action is constrained by lack of economically viable projects. The critical role of investment incentives is then to transform non-viable projects into viable projects by favorably affecting investors' expectations of return on projects relative to the cost of financing projects.



4.3 Table 4.1 then presents the results of some alternative simulations. Based on these parameters, it can be calculated that if the company is fully self-financed, and if there is no tax depreciation deduction, the project must generate a stream of pre-tax returns of \$260 (or 26 per cent), in order to break even and provide the required return to shareholders. With standard tax deductibility of depreciation (straight-line with an allowable asset life of ten years), the required pre-tax rate of return drops to the equivalent of 16 percent. This is roughly equivalent to the impact of a reduction in corporate income tax rate from 50 percent to 25 percent, that would lower the required return on the project to \$173 or 17 percent. Alternatively, if the company is assumed to finance half of its initial project cost through debt capital, and if interest payments are fully tax deductible, the required return on project declines to \$150 or 15 percent.

**Table 4.1 Simulating the Impact of Alternative Investment Incentives on the Required Return on a Project**

<b>Case I: Self-financing, <u>no tax deductible depreciation</u></b>		<b>Case IV: 50% debt financing <u>and no tax deductibility of depreciation allowances</u></b>	
Return to Shareholders	: 80	Return to Shareholders:	40
Economic Depreciation	: 50	Economic Depreciation :	50
Corporate Income Tax	: 130	Interest Payments :	70
Total Required Return	: 260	Debt Tax Shield :	-35
<b>Case II: Self-financing, with <u>Depreciation Tax allowances</u> <sup>a/</sup></b>		Increase in Real Value of Equity Due to Inflation - Induced	
Return to Shareholders	: 80	Depreciation of Debt :	-50
Economic Depreciation	: 50	Corporate Income Tax :	75
Tax-Depreciation allowance:	-50	Total Required Return :	150
Corporate Income Tax	: 80		
Total Required Return	: 160		
<b>Case III Decline in corporate <u>income tax to 25%</u></b>			
Return to Shareholders	: 80		
Economic Depreciation	: 50		
Corporate Income Tax	: 43		
Total	: 173		

a/ Based on straight line depreciation scheme with ten years allowable asset lifetime.

4.4 Both the full calculations and Zimbabwe's systems of tax shields are more complex than this. Zimbabwe currently has full expensing of investment for many fixed asset categories--that is more generous than the straight-line depreciation illustrated here--as well as tax deductibility of interest (though the importance of the latter for fixed investment is relatively low because of the limited use of debt finance). Together these constitute a more generous package than the tax incentives in the

simulations. This cannot be captured in such a simple model, but two points are clear: first, tax shields significantly reduce the required rate of return on a project, thereby increasing the number of projects than can meet a firm's hurdle rate; and second, Zimbabwe's tax allowances are generous, and are equivalent to a substantially lower average corporate income tax rate in the absence of allowances.

4.5 In a broader context, the importance of investment incentives can be appreciated by the way they affect the return on investment relative to the cost of capital. The return on one dollar of capital invested in a particular project relative to the cost of funding that dollar of capital is what matters in determining the desirability of investing in that project. The ratio between the return on investment and the cost of capital is of particular significance in the context of companies' fixed investment decisions both at the individual firm and at the aggregate corporate sector level. Changes in this ratio signal changes in incentives to invest in fixed assets. 20/

4.6 This then suggests a useful approach to evaluating investment incentives. There are two aspects to this approach: (i) the determination of the return on corporate capital assets and its distribution among the three major claim holders, i.e., the shareholders, the Government and the creditors; and (ii) the determination of the cost of capital and its sensitivity to changes in taxes, interest rate, the real price of capital and investors' required rate of return. In what follows, we will discuss the relevance of each and establish their quantitative dimensions for the corporate sector in Zimbabwe.

#### Profitability and the Rate of Return on Capital

4.7 The relevant concept of profitability, from the viewpoint of potential investors, is the future expected after-tax rate of return on investment. This is not directly observable. What is possible, instead 21/ is to rely on historical trends to infer such estimates of return on corporate investment. Two possible sources are available:

---

20/ To elaborate further on the significance of this ratio, it is useful to explore its relation with the Tobin q-ratio. Define  $q = MV/K$  where  $MV$  and  $K$  are respectively the market and replacement value of capital,  $c = Y/MV$  and  $r = Y/K$  as the cost of capital and return on capital where  $Y$  = operating profit. From these equations, it follows that  $q = r/c$ . For further detail and application in the context of developing countries, see Dailami (1986).

21/ Relevant to this expectation is not only the profitability of the underlying capital base, but also taxes and companies' dividend and financial policy. For foreign investors, there are also the additional factors of remittability of dividend and profit proceeds and exchange rate fluctuations. In the analysis in this paper we deal with uncertainty over remittability in the cost of equity.

securities markets and company accounts. We used the latter in this report, but first discuss the issues associated with the stock exchange.

4.8 The Zimbabwe Stock Exchange. There is considerable doubt on the reliability of securities market generated estimates of the return on capital. This doubt exists even when markets are highly developed, broadly based and considered to be efficient, as for instance in the case of the U.S. 22/ These doubts naturally multiply when market imperfections are serious and when major disparities persist between market valuation and the book value of assets. In Zimbabwe, the equity market has characteristically underestimated corporations' asset values in relation to book values. This undervaluation has, since 1981, averaged more than one-half of the book value of corporate equity, and is conceivably much higher if assets were valued at their replacement costs. In addition market fluctuations have been considerable, leading to wide variations, even in yearly observations (see Figure 4.1). Based on the performance of industrial share prices, the market registered an annual growth rate of 9.2 percent over the 1980-1987 period, which fares poorly given the corresponding rate of inflation of 12.2 percent over the same period of time, though growth since 1984 has clearly exceeded inflation.

4.9 There are two possible accounts of the apparent undervaluation of the equity market. First, the undervaluation could only be apparent, and the stock exchange could be doing a good job of assessing expected future returns on the capital of the companies. This would imply either that book values grossly overstate the economic value of firms' capital i.e. a substantial portion of assets are not worth much, or that there is a very high risk premium attached to future returns, that is reflected in a discounted market value. Second, the market could be inefficient, especially because of the very low level of primary and secondary market turnover. Since most firms also have a fairly fixed group of shareholders, the market valuation could be a poor guide to the value attached to them by these shareholders or by potential buyers. The evidence suggests a combination of both factors. On the one hand, there are reasons why company values may be discounted--this is especially true for foreign companies interested in getting their money, even at a major discount--and there also a range of reasons for there to be high actual and perceived risks. On the other hand, the exchange is clearly also not performing fully efficiently as an open market in company shares. There has been a dearth in new issues and the recent spate in rights issues has largely been due to special factors. The infrastructure for an active market is also very weakly developed. A major consequence of these factors is that the market is in a vicious cycle--the perception that it is a weak, and until recently a moribund, institution, serves as a disincentive to use it (and especially to seek a listing) and this serves to perpetuate the low level of activity. While it was decided not to use it for the rate of return

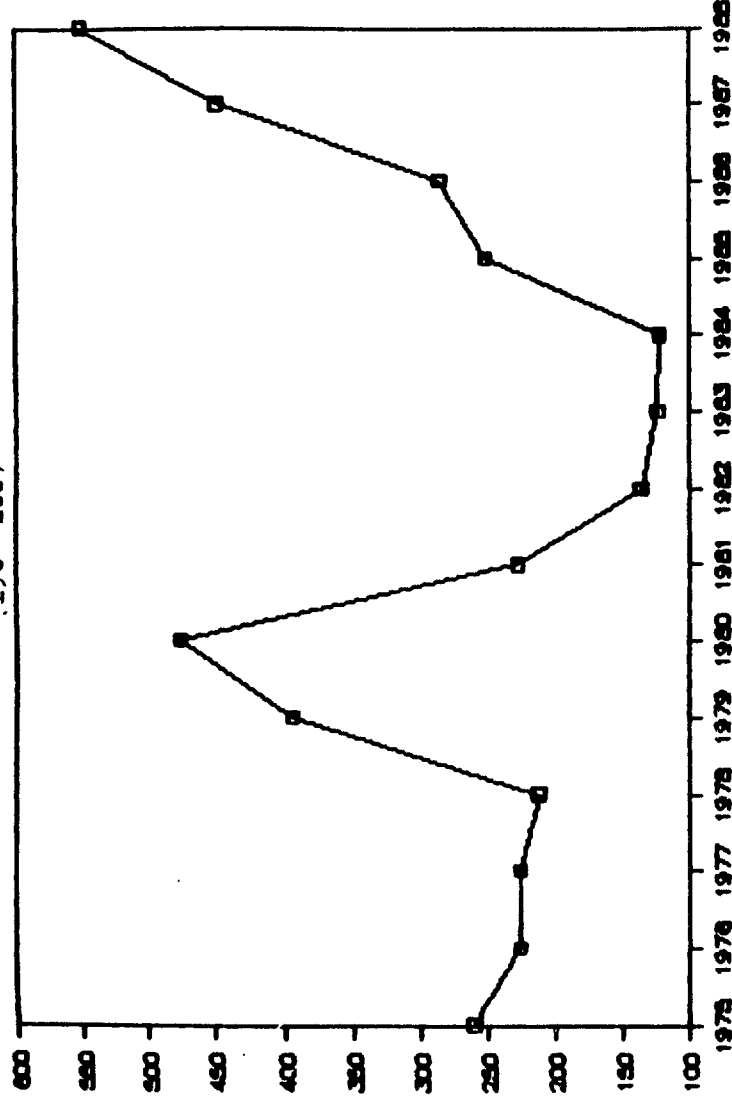
---

22/ See Brainard, Shoven and Weiss (1980), and Cohn and Modigliani (1985) for reasons for securities market failures for valuing corporate assets rationally and efficiently in the U.S.

Figure 4.1

# Industrial Share Price Index, 1975-88

(1967=100)



calculations, there are clearly important issues of how to get it going again, since it should lie at the core of capital market activity. A push on the demand side--to get more companies interested in using it--and on its capabilities, e.g. through technical assistance, is likely to be necessary.

4.10 Rates of Return from Company Accounts. The measurement of the return on corporate investment from company accounts is not free of problems either. There is first the problem of what concepts of capital and profits are to be adopted, since there are many ways that both capital and profits can be defined and measured. At one extreme, capital can be defined narrowly to include plant, equipment and inventories and, at the other, it can be defined broadly to include total tangible assets, as well as intangibles, such as property rights, goodwill and special earning opportunities. Similarly, profits can be defined net or gross of depreciation, and inclusive or exclusive of holding gains (losses). Secondly, company accounts record asset values at historical cost, and these, in the case of Zimbabwe, fall considerably short of replacement values; the overall rate of inflation (GDP deflator) has averaged over the 1980-1987 period, 12.2 percent per year; and, on top of that, capital goods prices have increased over the same period on average by 3.5 percent per year. Furthermore, uncertainties about the allocation of foreign exchange and supply of foreign capital goods are considerable in Zimbabwe, implying an important risk premium which needs to be attached to the replacement value of capital assets.

4.11 With these reservations in mind, Table 4.2 uses company balance sheet and income expenditure data to provide measures of the return on capital employed for the two subgroups of local and foreign listed companies over the 1980-1987 period. Capital employed is defined as the sum of plant, equipment, land, inventories, and net monetary assets (cash and net accounts receivable). Profits are defined as operating incomes net of depreciation and excluding holding gains (losses). The estimates are inclusive of company taxes and thus are suitable measures of corporate profitability and productivity of the underlying capital base. The estimates indicate returns of 18.0 and 15.1 percent respectively for local and foreign companies. The higher return for local companies seems to reflect the higher degree of debt financing. Having more flexibility and access to domestic capital market, the local companies have been in a relatively better position to optimize their financing mixes and, consequently, their overall profitability. For the companies, as a whole, the return on capital has averaged 15.8 percent over the 1980-1987 period in nominal, or 3.6 percent in real terms.

4.12 Of course, the returns reported in Table 4.2 refer to the profitability of total capital employed, which needs to be shared among the three classes of claim holders; i.e., the Government, the creditor and the shareholders. Table 4.3 shows the actual distribution of operating income for the listed companies as a whole for the period from 1980 to 1987 into its three components: corporate income taxes paid, net interest, and net equity income. It can be seen that the share of the Government or the effective corporate income tax rate has averaged 27.8 percent. This is considerably lower than the average statutory tax rate of 52.2 percent for

over the same period. This large differential between the corporate-effective and statutory income tax rates in Zimbabwe reflects the availability of generous tax depreciation allowances, which permit companies to fully deduct from their current income investment expenditures on a wide array of assets.

4.13 From Table 4.3 it can also be seen that net interest payments, as a percentage of corporate operating income, is relatively low in Zimbabwe. For the 1980-1987 period, this amounts to an average of 19 percent for all listed companies. This is consistent with the relatively low share of debt in the corporate capital structure, as discussed in the previous chapter. This, in conjunction with the relatively low effective tax rates, implies in essence that the shareholder in Zimbabwe has the lion's share in corporate operating income. This share has averaged 53 percent for the listed companies as a whole for 1980-87. This, however, still fails to capture the true economic share of the equity holder in corporate operating income. To arrive at such a concept of equity income, it is necessary to make adjustments for depreciation in the real value of debt induced by inflation. Table 4.4 contains the final results, after such gearing adjustments are made. It is thus seen that shareholders have earned, during the period 1980-1987, an average return on equity of 22.6 and 15.7 percent respectively in local and foreign companies. The relatively higher return on equity in local companies reflects their higher degree of profitability.

Table 4.2 Estimates of Pre-tax a/ Rate of Return on Capital Employed b/  
for Local and Foreign Non-Financial Corporations, 1980-1987  
(percent)

Year	Total	Foreign	Local
1980	19.13	19.40	18.31
1981	18.87	17.62	22.91
1982	13.95	11.77	20.71
1983	11.20	10.06	14.50
1984	11.63	11.08	13.28
1985	17.23	16.83	18.22
1986	15.81	15.48	16.61
1987	18.95	18.89	19.06
Average	15.85	15.14	17.95

a/ The before-tax rate of return is the ratio of operating profits net of depreciation and before corporate income tax to total capital employed.

b/ Capital employed is defined as the sum of plant, equipment, land, inventories and non-interest bearing net monetary assets.

Source: Company accounts of 48 listed companies on the ZSE.

**Table 4.3 The Distribution of Business Operating Income<sup>a/</sup>  
into its Components, 1980-87  
(percentage of operating income)**

Year	Net Profit	Taxes	Net Interest
1980	61.77	28.84	9.39
1981	65.80	25.11	9.09
1982	47.70	30.31	21.99
1983	41.37	27.43	31.20
1984	42.25	29.05	28.70
1985	58.29	22.46	19.25
1986	54.53	27.47	17.99
1987	53.50	31.80	14.70
Average	53.15	27.81	19.04

a/ Operating income is defined as the sum of net interest payments, direct corporate income taxes and net profits before taxes. Ratios are calculated as percentage distribution of operating income into, profits, taxes, and net interest payments.

Source: Company accounts of 48 listed companies on the ZSE.

**Table 4.4 Estimates of After-tax Return on Shareholders' Equity a/  
for Local and Foreign Non-Financial Corporations, 1980-87  
(percent)**

Year	Local	Foreign
1980	26.76	21.00
1981	30.73	21.20
1982	28.15	13.02
1983	21.40	12.79
1984	11.34	8.38
1985	18.31	16.39
1986	21.68	16.34
1987	22.45	17.06
Average	22.60	15.77

a/ Includes adjustment for leverage ratio.

Source: Company accounts of 48 listed companies on the ZSE.

## The Cost of Capital

4.14 As already discussed, the relevant concept of profitability for investment decisions is the return on capital relative to the cost of capital. What matters for investment is not just how much a dollar of capital invested in a particular project earns, but also how much that unit of capital costs. Like the return on investment, the cost of capital is subject to numerous interpretations and measurements. The most commonly used concept is the cost of funds, which is a weighted average of the cost of debt and equity, with weights reflecting the capital structure of the company or the sector concerned. For corporations in Zimbabwe, this implies that the cost of funds is principally determined by the cost of equity: as discussed previously, the share of equity in the aggregate financing mix of listed companies is three times higher than the share of debt. At the same time equity is much more expensive than debt. Interest expenses in relation to total debt outstanding have averaged (over the 1981-1987 period) 12.2 and 12.4 percent respectively for local and foreign companies. These rates are strikingly close to the commercial banks' minimum lending rate, which has remained constant at 13 percent since 1981. Furthermore, taking into account the tax deductibility of business interest payments and inflation, the real effective i.e. after-tax cost of debt has, of course, been considerably lower, as shown in Table 4.5. Indeed, the average real effective rate over the 1981-1987 period has been negative for both local and foreign companies.

4.15 There is greater uncertainty over the proper concept and measurement of the cost of equity to corporations in Zimbabwe. <sup>23/</sup> For local companies, such a cost can be measured as the return on alternative investment opportunities. If such alternatives are assumed to be long-term government securities, which have yielded an average return of 13 percent <sup>24/</sup> over the 1980-1987 period, the corresponding cost of equity can be taken to be in the order of 15 to 18 percent, if an equity risk premium of two to five percent is included.

---

<sup>23/</sup> In theory, the cost of equity has a straightforward interpretation; it is the discount rate that equates in present value the expected future stream of firms' dividend payments to the market value of its stock. Viewed from the perspective of the stock holders, the higher the degree of uncertainty attached to the firms' dividend payments or their repatriation in the case of foreign companies, the higher the cost of equity. In other words, the higher the degree of uncertainty with regard to the firms' future earnings and dividends, the higher the return that investors require in order to be induced to invest.

<sup>24/</sup> This is the average yield on 25-years government stocks.



**Table 4.5 The Real Effective Cost of Debt<sup>a/</sup> for  
Local and Foreign Non-Financial Corporations.**  
**1980-1987**  
**(percent per annum)**

Year	Local	Foreign
1980	-6.7	-4.8
1981	-3.83	-1.98
1982	-0.99	-0.33
1983	-4.26	-4.29
1984	1.33	2.35
1985	0.49	-1.08
1986	0.21	-0.2
1987	1.82	0.95
Average	-1.5	-1.16

a/ Real after tax cost of debt calculated as  $(1-u)R-x$ , where  $u$  is corporate tax rate,  $R$  is nominal effective lending rate, and  $x$  is rate of inflation (GDP price deflator).

4.16 Foreign-controlled companies, of course, operate under different sets of constraints and objectives than their local counterparts. These companies are often subsidiaries of large multinationals with world-wide operations. As such, their investment and financing policies are dependent not only on local conditions and regulations, but also on the broader objectives and policies of the parents. Viewed from this perspective, the expected rate of return required on an additional dollar of investment in Zimbabwe is the opportunity cost of foregoing an equivalent investment in other subsidiaries in other parts of the globe. Returns on these investment alternatives have become increasingly attractive in the 1980s. The average return on capital employed in British industrial and commercial companies, for instance, has doubled from an estimate of 6.4 percent in 1980 to 11.5 percent in 1987. <sup>25/</sup> Similar increases in profitability have been common in other industrial countries. Indeed, the upward trend in the return to capital in industrial countries has been an important feature of these countries' developments in the 1980s.

4.17 What these increasing trends in profitability in industrial countries implies is that the opportunity cost of investing in Zimbabwe (or indeed, in most other parts of the developing world) has increased in

<sup>25/</sup> See Bank of England, Quarterly Bulletin, August 1988, pp 379, for these estimates. Note that these estimates refer to the pre-tax rate of return on capital employed, where capital is measured at replacement cost, and hence they are not directly comparable with Zimbabwean estimates reported in Table 4.2.

1980s. On top of this is the question of the degree of uncertainty with regard to future dividend payments and their remittability to foreign shareholders. This constitutes the key factor in determining the risk-premium that is attached to the cost of equity for foreign companies in Zimbabwe. In this respect, the government policy of altering the remittance ratio, most recently to 25 percent of after-tax profits, can be viewed as contributing to an increase the cost of equity. The precise impact is difficult to gauge, depending on the investor's expectation of the continuation of this level of restrictions on dividend remittability and expected disinvestment options, as well as company earnings and dividend policy. The general effect has been captured in the quantitative analysis by adding an additional risk premium to the required real cost of equity for foreign companies.

4.18 The cost of funds is only one component of the overall cost of capital which is relevant for investment decisions. For investment in fixed assets (plant, machinery, and equipment), the other main components of the cost of capital are: the acquisition price of capital, i.e., the cost of acquiring one unit of machinery and equipment, taxation, depreciation allowances, and the cost of asset decay; i.e., real depreciation in terms of wear and tear and the obsolescence of fixed assets. <sup>26/</sup> The procedure for incorporating the influence of these factors on the cost of capital under the Zimbabwean tax code is described in Annex I, where a general expression for the real cost of capital for the non-financial corporate sector is derived. The Annex also contains the various assumptions underlying our estimates of the real cost of capital for corporations in Zimbabwe. The results for both local and foreign companies are shown in Figure 4.2. It is thus noted that the foreign companies face a much higher cost of capital than their local counterparts. The difference for 1987, for instance, is in the order of six percentage points. For the period 1980-1987, as a whole, the cost differential between the foreign and local companies averages 7.5 percentage points. Two reasons explain this cost differential: the higher degree of equity financing by foreign companies and the higher degree of risk premium attached to investment in Zimbabwe by foreign shareholders. In essence, the foreign companies rely relatively more on equity financing, which is in Zimbabwe the more expensive source of finance.

4.19 For both the local and foreign companies, Figure 4.2 shows a sharp increase in the real cost of capital since 1984. This stems from a combination of several factors, including: (i) a reduction in the rate of inflation in 1984, from an average rate of 15 percent in the previous three years (1981-1983) to less than ten percent from 1984; (ii) an increase in the corporate income tax rate; (iii) higher interest rates; and (iv) a sharp increase in the real price of capital goods (see Figure 4.3). The overall impact has been to raise the real cost of capital to an annual

---

<sup>26/</sup>

The real cost of capital can be expressed as (taxes). (Real price of capital goods) [cost of funds and rate of asset decay - rate of depreciation allowances]. Numerical value, for 1987 and for foreign companies, are: (2.074) (1.286) [6.169 + 5 - 5.41] = 16.45

average of 9.1 percent over 1984-1987 period for local companies, compared to a corresponding rate of 3.1 percent in 1980-1983 period. Of this increase, roughly 22 percent can be directly attributed to higher capital goods prices <sup>27/</sup>, and the rest to inflation, higher interest rates and higher corporate income taxes.

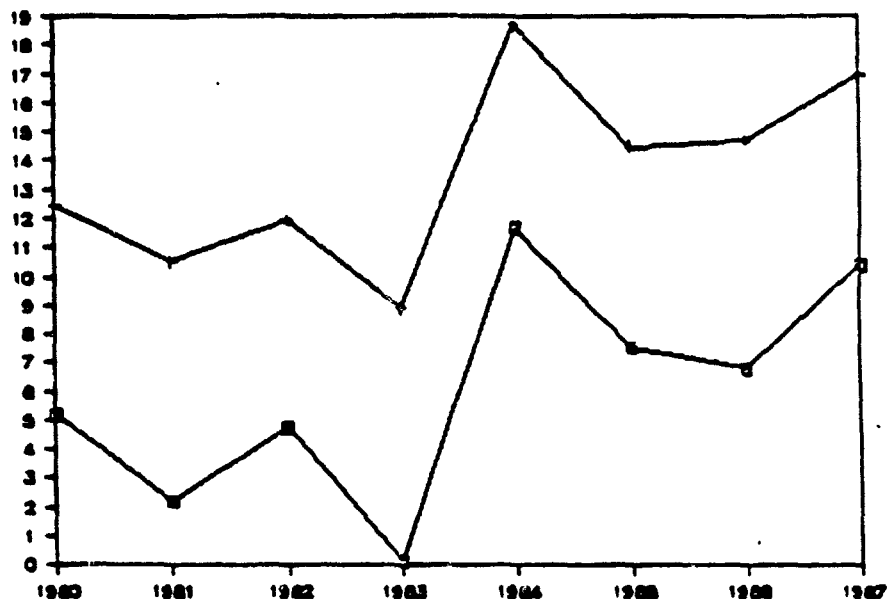
4.20 In conclusion, the real cost of capital is relatively high in Zimbabwe, and this is especially so for foreign corporations. This is due largely to the high risk premium associated, inter alia with uncertainties over dividend remittability, that raises the cost of equity, and the high price of capital goods. Both can be traced, at least in part, to the workings of the foreign exchange allocation system. High corporate tax rates also tend to raise the cost of capital, but this is offset by the generous tax allowances. Interest rates are not an important factor. It might be added that this could still be an underestimate for the average cost of capital for firms, since those prevented from investing because of quantitative restrictions technically face an infinite cost of capital at that moment. The overall problem outlined at the beginning of this chapter has apparently not been so much that profitability has been low as the cost of capital has been high. Policy measures geared to stimulate corporate fixed investment thus need to deal with the current high cost of capital and especially the high perceived risks of investment. This is taken up in Chapter 6.

---

<sup>27/</sup> This is based on the comparison between the actual real cost of capital during 1984-1987 period and its value if capital goods prices had remained constant in real terms during 1984-1987 period. Thus, under the constant capital goods price scenario, the real cost of capital for local companies would have averaged over 1984-1987 period to 7.4 percent, compared to the actual rate of 9.1 percent.

Figure 4.2

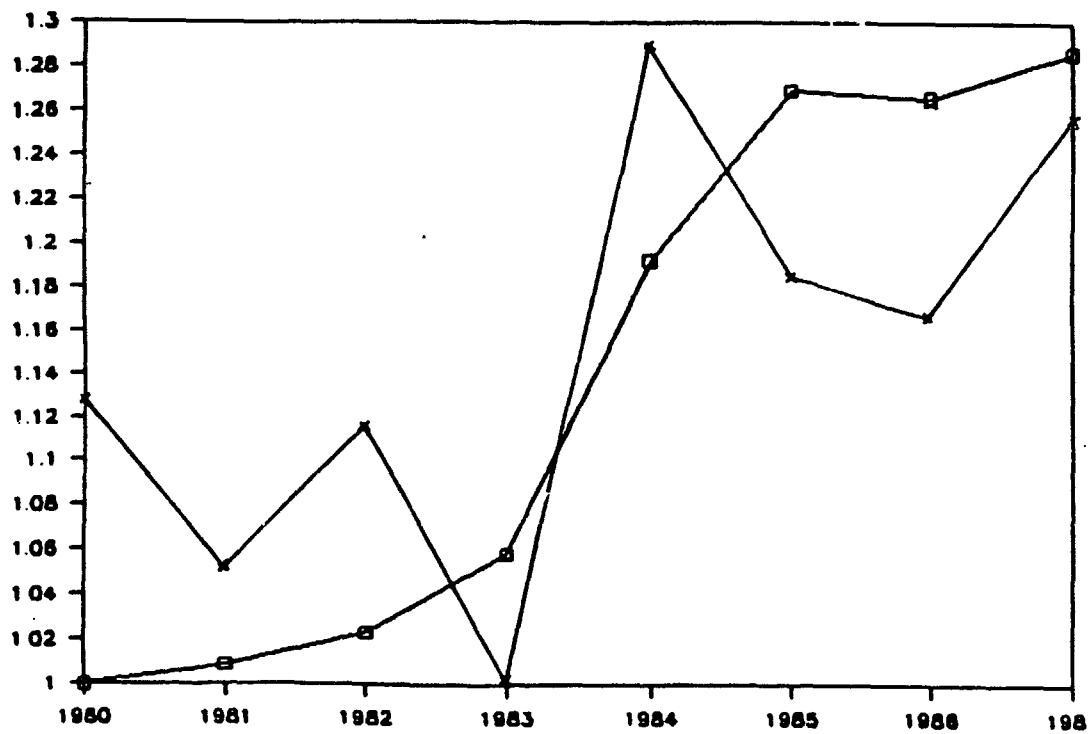
The Real Cost of Capital, Local and Foreign Companies, 1980-87



□ Local      × Foreign

Figure 4.3

The Relationship Between the Real Cost and Acquisition Price of Capital, 1980-87 for Local Companies



× Cost of Capital  
 □ Relative Price of Capital Goods

## 5. THE REGULATORY FRAMEWORK FOR CORPORATE INVESTMENT

5.1 Extensive regulation and administrative control was part of Zimbabwe's inheritance at independence and has continued to be central to economic policy. Despite rapid growth of the public sector since 1980 the private sector is still dominant in the commodity-producing sectors. However, the Government exerts considerable influence over the broad areas of price determination for many commodities, allocation of foreign exchange, and the investment decision-making process. In the area of the investment process, these interventions are concentrated in the project appraisal and approval stage, rather than in the planning and implementation stage. Under the prevailing regulatory framework, all companies, regardless of their ownership status, need to obtain project approval from the Industrial Projects Committee (IPC), before they can obtain the foreign currency allocation required for the importation of the necessary capital equipment. The process is cumbersome, entailing lags of 10 or even 14 months. Although there have been some improvements in the past year, especially for investments from blocked funds since the May 1987 announcements, the time and uncertainty associated with the process remains a pervasive concern.

5.2 The extent and nature of government interventions in the planning stage of investment process varies, however, according to the ownership status of the enterprise concerned. Beside the restrictions implied by prevailing price controls, which is firm specific, the local companies are generally treated more generously and more favorably than their foreign counterparts. With regard to their choices over project selection, financial and dividend policy, local companies have full autonomy. Thus, their decisions over the amount of investment, type of assets, funding and retention policies are internal to their corporate organization and are governed by relevant macro and financial considerations. In contrast, the foreign-controlled companies operate in a tight web of regulations and restrictions. These regulations relate to strict limitations imposed on their ability to raise funds locally and to distribute their earnings as well as the slow process of assessment new investment proposals. Here we first review the context for the regulation of foreign capital, including recent changes in policy, and then discuss the complementary aspects of domestic regulation.

### Foreign Capital and Government Policy: A Strategic Interaction

5.3 The regulatory framework for foreign companies needs to be cast in a broader context. Because foreign controlled companies control the dominant share of assets in the Zimbabwean corporate structure, they have unavoidably become targets of public policy debate. The debate has centered, in particular, around three issues: (i) the degree of autonomy and flexibility over project approval and appraisal; (ii) dividend remittability; and (iii) management of financial surplus funds. These represent important aspects of companies' investment and financial policy, which, in the context of most countries, are subject to the discretion of the management of the company concerned and are carried out within the

market-determined structure of risks and returns. The difference in the case of Zimbabwe arises partly from the Government's policy of subordinating dividend remittances to other claims within the country's tight supply of foreign exchange, and partly from its basic policy of exerting direct influence on the process of private investment in order to allocate resources to social and economic priorities.

5.4 The fact that remittance of dividends has so far fallen victim to balance of payments adjustments can lead to increased uncertainty and, hence, to an erosion of foreign investors' confidence. As we saw in Chapter 4, the inclusion of some measure of this risk premium has a major impact on the cost of capital for foreign firms and the uncertainty over the amount of dividends that can be remitted to foreign shareholders appears to have been a major source of tension between the Government and foreign companies. While much is made of the implicit tax on the companies' shareholders, it should, however, be emphasized that allowable remittances are not out of line with corporate practices world wide. In fact, even the recently reduced 25 percent ratio of after tax profits that are remittable under the May 1987 declaration (see below) is in line with the average dividend pay-out ratio of companies in industrial countries. <sup>28/</sup> Again it is the impact on uncertainty--the fear that dividends will be permanently restricted--that matters. Conversely, a higher remittable rate of return to shareholders is required ex ante to cover the higher perceived risks of doing business.

5.5 Perceived from the viewpoint of foreign-controlled companies, there is also an important element of strategic behavior; thus their reluctance to invest may be seen as a strategic tactic intended to elicit more favorable terms and to establish a set of ground rules which would be more akin to their long-term interest. Within this context of strategic interaction, companies have the ultimate option of not investing or disinvesting. This imposes on the Government both the direct cost of depriving it from the usual tax and other revenues and the indirect social and economic costs of lower investment levels, including a higher level of unemployment. Such an option, however, would impinge on the companies two types of costs: the cost of losing investment and profit opportunities; and the cost of facing a more competitive environment, should the Government encourage entry of newcomers through discriminatory treatment. For the existing companies, however, the sheer benefit of being inside (which saves them from agency cost) places them in a strongly advantageous position.

5.6 In terms of examining strategic interactions between foreign capital and the Government, it is important to emphasize the diversity of the foreign-controlled sector. At the cost of oversimplification, three broad groups can be distinguished in relation to their attitude to disinvestment and potential new investment: established investors that have made a strategic decision to leave Zimbabwe; established investors that

---

<sup>28/</sup> The average dividend pay-out ratio (over 1980-84 period) for the aggregate non-financial sector of major industrial countries ranges from 6.4 percent in Finland to 23.1 percent in the United Kingdom.

have made a long-term commitment to stay; and potential new investors. The first group is predominantly interested in the best terms it can obtain for disinvestment and, in the meantime, the maximization of short-run profits. The second would be expected to be more concerned with the rules of the game for current activities and, in common with the third group, obtaining the best longer term position for future investments and profits. Government policy and expectations over the future have, of course, a strong influence over the proportion of existing firms that fall into each of the first two groups.

5.7 There have been a number of changes in the regulatory environment for foreign investors in the 1980s. Despite the Government's public concern over the proportion of the economy owned by foreign capital, there was initially an improvement in the terms for most investor categories. Those firms whose remittances had been fully blocked during the UDI period (primarily British companies) were allowed to remit up to 50 percent of their post-tax profits (subject to a withholding tax of 20 percent that could be offset against taxes in the home country). At the same time, the concept of "venture capital" was introduced for new investments, with relatively favorable disinvestment provisions. This was designed to effectively discriminate between new and pre-independence investments. However, despite these provisions, new investors were clearly reluctant to invest in Zimbabwe. Much was made by the multinationals of the Government's refusal to sign the OPIC agreement (on the grounds that the investor's rights were already covered by the constitution). Then, in 1984, the worsening external position led to the government decision to temporarily disallow remittances for pre-1979 investments--there was a clear choice to subordinate the claims of foreign equity holders to Zimbabwe's foreign creditors. This was lifted in early 1986, with the restoration of 50 percent remittability (and accumulated claims allowed to go out through five-year bonds), but in May 1987 this was again reduced to 25 percent of post-tax profits. In neither case were the terms of venture capital affected, either with respect to remittability or disinvestment rights.

5.8 The May 1987 reduction of remittability was accompanied by other measures designed to encourage foreign-controlled firms to invest in Zimbabwe. This focused on the blocked and surplus funds of established companies. 29/ Two measures were introduced: a reduction in the allowed rate of interest on these funds from ten percent to five percent; and the introduction of new, somewhat liberalized, procedures for approval of domestic investments out of these resources, that would also give the new investments venture capital status, with the relatively favorable conditions this confers. There is little information on the level of investment activity from these funds. The bulk of the funds have continued to add to the liquidity of the monetary system, and there is also reported

---

29/ Blocked funds are legally eligible for expatriation, but are prevented from this by the current restrictions; surplus funds are owned by foreign firms, but are not eligible for expatriation, for example post-tax profits that are not declared as dividends to foreign share-holders.

to continue to be a significant waiting period while the new committee reviews proposals submitted. In view of the analysis in Chapters 2 and 4 on the main factors affecting the cost of capital and investment levels, it would be surprising if the reduction in interest on alternative domestic financial assets had any influence on the decision to invest. Indeed the principal effect has been to transfer profits to the largely foreign-owned banking sector. In recognition of this, the Government imposed in mid-1988 a supplementary tax on banks having this category of deposits.

5.9 There has been much more activity in relation to disinvestment. Since around 1985, foreign firms wishing to disinvest have gone through two main routes: sale at a discount of between 40 and 60 percent of net asset value to either the Government, a cooperative or a group with a majority of black Zimbabweans ownership, and subsequent expatriation of the receipts in six-year Z\$ bonds bearing an interest rate of four percent; or sale at a discount of 70 percent of net asset value to the same categories of domestic groups, with the sale proceeds expatriated over one or two years. <sup>30/</sup> It was announced in early 1989 that the terms for the second category have changed with a required discount of at least 80 percent and sale to "approved Zimbabwean investors". While figures are not available, there is reported to have been a flurry of disinvestment activity in the past two years, both to the private sector, including a number of leveraged management buyouts, and a smaller number of major sales to the Government.

5.10 Finally, the Government has recently been in the process of reviewing the framework for new foreign investors and has announced that it will issue new guidelines in the first half of 1989. These are expected to focus on the three areas of the procedures for investment approval, the conditions of investment (notably on remittability) and guarantees.

5.11 In conclusion, two observations are relevant to the regulation of foreign investment. First, in the design of policy, it is important to explicitly distinguish between the different categories of investors noted and outlined in para 5.6. The Zimbabwean Government has been attempting to do just this, but the only area of "success" has been in allowing an accelerated pace of disinvestment at a substantial discount. Attempts to encourage higher investment from either existing or new investors have had little impact on investment levels. Second, the evidence on rates of return and on characteristic levels of dividend payout suggest that actual profit levels--the terms of the relationship between the country and the foreign investor--are not bad. The focus of attention for new investment needs to be on issues associated with uncertainty and with the perceived rules of the game, including approval procedures for new investments. These policy questions are taken up in Chapter 6.

---

<sup>30/</sup> These do not affect the existing alternative of purchase of 12 or 20-year (for individuals and companies) Z\$ bonds bearing a four percent interest rate. As noted above, the terms for venture capital are more generous and have not changed.



### Domestic Investment Regulation and Foreign Exchange Allocation

5.12 As noted above, there is little direct regulation of investment by domestic firms, in contrast to the foreign-controlled sector. However, this has essentially not been an issue, since the centralized control of foreign exchange allocation and external borrowing by the private sector gives the Government effectively full approval powers over any private investment decision (or any decision by a joint venture of publicly owned business for that matter). Investments with no foreign exchange content are not covered, but these are of negligible importance for the corporate sector. Thus the committee system for foreign exchange allocation constitutes a de facto investment regulation system. The principal reported criteria for approval include net foreign exchange earnings (probably the most critical one), employment, regional location and the priority of the proposed investment. In addition to approval of resources for capital goods imports (or borrowing for this purpose), approval by the appropriate committee in effect confers a right to a share of the cake in future allocations of foreign exchange for current imports. It is clear that any conclusions on investment approval have to be cast within the context of the Government's decisions on any reform of the overall foreign exchange allocation system. Equally, if there is a decision to undertake some form of trade liberalization, policy toward investment regulation will have to be directly tackled. This is taken up in the final chapter.

5.13 There has been one effective modification to the foreign exchange allocation system for investment, through allowing selected financial institutions to directly lend in foreign exchange to businesses, provided the foreign exchange risk is passed on to the final borrower. The two cases involve the Zimbabwe Development Bank (ZDB) and a merchant bank, UDC ltd. In both cases, approval by the Industrial Projects Committee is still required, but it is reported that this generally goes through quickly, in contrast to applications for the IPC's "own" resources. Both have been functioning for several years, but demand for the resources has been much less than would have been expected, given the general emphasis in the private sector on the severity of the foreign exchange constraint. The principal reported deterrent has been the need to assume foreign exchange risk (combined with relatively high interest rates)--in the case of allocations by the IPC, the Government bears the full foreign exchange risk. This again reveals the high degree of risk aversion of the corporate sector. In response to the private sector's general fears over foreign exchange risk, the Government announced a new facility in mid-1988 that would extend forward cover on foreign exchange to four years at a cost of five percent per annum. This is unusually generous by international standards. As of end-1988 there was no information on the workings of this new facility.

5.14 The final issue of relevance to investment regulation concerns the potential impact of other aspects of the regulatory system to investment decisions. Job security regulations--the requirement that the Government approve virtually any layoff by a business--raises the expected fixed costs associated with any investment and increase the likely risk of losses, especially in years of recession. Price controls have a more ambiguous effect. The private sector has always complained about them, but

it is not clear that they actually increased perceived risks in the past, since they have been largely operated in terms of markups over costs, i.e. as a guarantee of reasonable profits! However, the introduction of the price freeze in mid-1987 and the considerable uncertainty over how it will be fully unwound, has undoubtedly had an adverse impact on expected profits and investment intentions.

## 6. POLICY CONCLUSIONS

6.1 The sources of weak private investment are complex. Adjustments in conventional areas of influence on private investment are unlikely to work when the problem also lies in the overall environment for investment decision-making and intangible perceptions of future risks. A recovery in private business investment will require a range of policy adjustments designed to encourage the underlying demand for expansion in capacity, relax supply-side constraints on investment, facilitate investment decision-making, and reduce the perceived risks of investment. The Government is in the process of reviewing the environment for private investment and is expected to issue new guidelines for foreign investors in the first half of 1989. This is an important area, but needs to be cast in the context of other influences on private investment. This section pulls together conclusions in seven areas that could contribute to the development of a supportive overall framework for a recovery in private investment: the macroeconomic and financial framework; foreign exchange and supply-side constraints; investment appraisal; financial sector development; complementary regulatory issues; the tax/incentive framework for investment; and the environment for foreign investment, including the management of disinvestment. The relationship of these policy areas to the key issues in supporting a sustained recovery are outlined in Table 6.1.

Table 6.1 Issues and Policy Areas for a Private Investment Recovery

<u>Issue</u>	<u>Policy Area</u>
Reducing Supply-side Constraints	Foreign exchange availability and related supply-side factors Appropriate financial framework and financial sector development.
Reducing risks changes	Sustainable environment through macroeconomic adjustment and in regulatory environment Foreign investment environment Foreign exchange risk
Facilitating decision-making financial system	Investment appraisal and the
Encouraging demand for capacity expansion	Macroeconomic framework
Encouraging efficient investment choices	Tax/incentive framework
Broadening ownership	Disinvestment policy Financial sector development

6.2 As noted at the beginning of this paper, an overall assumption is that the Government is committed to maintaining a significant role for the private sector i.e. the focus is on how to support a recovery in private business investment within a mixed economy. In addition, policy conclusions need to pay attention to two special factors: first, that the key issue is not to improve current profits, but to raise expected future profits, through reducing the perceived risks of investment; second, that the Government has an objective of increasing domestic, and especially black Zimbabwean, ownership.

#### A. The Macroeconomic and Financial Framework

6.3 The macroeconomic framework needs to have three features if business investment is to recover: first, sufficient growth in demand for firms to experience growth in capacity utilization and thereby increase the underlying desire for investment; second, adjustment in domestic resource imbalances to ensure adequate domestic savings for investment; and third, to the extent feasible, assurances of reasonable stability in overall macroeconomic conditions.

6.4 The management of the budget deficit is the main factor here. At first sight there are conflicts between the first two objectives: growth in demand would seem to imply maintaining or increasing the deficit, whilst freeing up savings for business investment suggests the opposite. This needs to be put into a medium-term context. The current budget deficit is not sustainable--it has been financed in the past few years through the creation of a private sector net savings rate of 8-10 percent of GDP: this is not consistent with a sustained recovery in private sector demand; in addition, the dynamics of rising interest payments on public debt will gradually catch up with deficit finance. So any adjustment needs to include a significant, medium-term decline in net public sector resource use in the economy. To avoid cutbacks in public services and public investment, the bulk of this would need to come from a reduced share of public spending (especially subsidies) in GDP.

6.5 The objective, then, is to reduce the deficit in the context of steady growth in demand: deficit reduction alone could lead to recessionary adjustment that would quickly choke off any investment recovery. This requires complementary measures to stimulate export and private domestic demand and sufficient flexibility in the public sector resource position to allow temporary stimulation of demand when necessary. This requires a more detailed macroeconomic analysis that has not been undertaken for this paper, but the following conclusions can be drawn from previous work.

(1) There is a need to stimulate export demand through a mixture of exchange rate movement and other special incentives. This is now an important part of government policy and central to the assessment of the options for trade liberalization; the issues are not discussed further here.

(ii) Managing the growth in domestic private sector demand is more complex. Obvious instruments--tax reductions, wage increases, reduced (real) prices of controlled products--conflict with other requirements of the structural adjustment process. Of more importance may be a careful relaxation of the import constraint: in view of the past import compression, increased current imports (especially of intermediates and raw materials) can help support a private sector recovery through the direct impact on capacity utilization and indirect effects through input demand and, in some cases, increased labor income. If export growth is sluggish, some increase in borrowing may be necessary, but this needs to be managed carefully to ensure consistency with both aggregate external borrowing limits and the competing demands for foreign borrowing from public and private sector investment. Price adjustments, including exchange rate movement and excises on luxury consumer goods, can also help the process though encouraging switching of the underlying (non-rationed) demand away from imports and moderating the impact of private demand growth on the trade balance.

(iii) The key to effective budgetary adjustment is an increase in the "discretionary" component of the deficit, i.e. that portion of the deficit that can be relatively easily adjusted. Macroeconomic analysis indicates that a reduction in the deficit of between 1.5 and 2.5 percent of GDP per annum over the next two to three years is likely to be consistent with the steady growth in demand that will support an investment recovery. Under these circumstances it would be highly desirable to make adjustments on the "structural" deficit of, say, 2.5 percent of GDP per annum, and either keep some spending in reserve, or include easily postponable expenditure items in the budget, e.g. in the investment program, in order to provide the Government with the flexibility to deal either with overheating or inadequate demand in the economy.

6.6 Reductions in the deficit that are clearly based in structural changes in public sector resource use are also the key to the perceived macroeconomic stability of the country. The business sector is sophisticated and is vividly aware of the future risks that current deficits bring and also of the often gloomy content of recent budget speeches. Thus the perception of a serious effort to tackle the sources of the deficit would be a major gain for the business environment. It will also be necessary to the achievement of greater domestic price stability. However, low inflation rates are less assured in the short run in view of the likelihood of a surge in inflation in response to the unwinding of the price freeze and the need for further adjustments in controlled prices (including continued depreciation of the exchange rate). This is likely to be unavoidable and the main questions concern how to manage it without exacerbating relative price distortion and then how to set in train a disinflationary process that does not lead to a recession in the real economy. 31/

6.7 Adjustments in the real imbalances associated with public sector deficits will have a major influence on the pattern of financial sector

---

31/ See Chhibber et al (1989) for a discussion of these issues.

resource use. An investment recovery will lead to growth in private sector demand for credit--initially for working capital and subsequently for fixed investment. As Chapter 3 showed, there could be quite a large increase in the corporate sector's demand for funds. The most effective way of providing for this could be a (gradual) relaxation in the restrictions on financial institutions, of which the most important is that 60 percent of institutional investors' assets be invested in "prescribed" (public sector) liabilities. More conventionally, lower use of credit from the monetary sector from the whole public sector (including the Agricultural Marketing Authority) would allow growth in private credit demand.

## **B. Foreign Exchange and Supply-side Constraints**

6.8 A recovery in investment will require an increased supply of its three components: foreign exchange for imported investment goods; domestic capital goods; and domestic construction goods. The first is likely to constitute the severest constraint for the corporate sector, in view of the predominance of modern manufacturing and mining activities whose productive capital has a critical, and often large, import content. So increases in foreign exchange for private sector investment goods is likely to be a necessary condition for growth in corporate investment. Given the general foreign exchange constraint, and the low probability of major foreign investment inflows, it would be appropriate to allow increased external borrowing to finance private corporate investment in the short and medium term. The level of such borrowing would depend on both the overall external debt position and the appropriate division of investment between the public and private sector. In the assessment of appropriate levels of borrowing for public sector projects, it is important to take account of this private sector demand for external finance for investment.

6.9 The form of borrowing for private investment will depend on the policy regime for foreign exchange allocation. If the Government maintains the existing system intact, then increased borrowings could occur either via higher approvals for individual private sector projects by the External Loans Coordinating Committee, or increased borrowing for investment purposes by the Government or financial intermediary (such as the Zimbabwe Development Bank) with the allocation across projects decided at a subsequent stage, by the Industrial Projects Committee or financial institution. If the Government shifted to less specific allocation of resources in this area--as recommended in the next section--it would still probably be appropriate to maintain overall controls on private sector borrowing, but greater reliance would then be placed on external borrowings to finance investment facilities managed within the financial system. While in the long run a relaxation of restrictions on external foreign borrowing by the private sector would be desirable, during the transitional period it would be appropriate for control to be maintained, given both the continuance of controls elsewhere in the system and the initial excess demand for foreign exchange. Levels of borrowing for private investment should then be based on an overall external and domestic financial programming exercise.

6.10 The question of borrowing for private sector investment leads directly to the management of foreign exchange risk. As noted in Chapter

5, until the recent change, the Government operated a dualistic system. For projects funded from the Industrial Projects Committee resources, the Government bore the whole risk and private firms financed the foreign exchange purchase from domestic resources (generally internally generated). There are reportedly queues for IPC resources. On the other hand, firms going to ZDB or udc ltd. in the financial system for foreign exchange for investment had to bear the whole risk. Queues have been much shorter here. The new scheme that provides foreign exchange cover for four years represents a compromise in these circumstances: it allows firms to eliminate risk, but at a cost. At a charge of five percent per annum there would be no transfer between the Government and users of the facility if the exchange rate experiences a nominal depreciation at the same rate of five percent per annum. This compares with a pace of nominal depreciation of 8.5 percent per annum against a trade weighted basket in the 1983-87 period i.e. the current terms appear quite generous to users, especially as it provides for full cover, with no risk-sharing. In view of these favorable terms, it would now be desirable to remove the dualism from the system and pass on the foreign exchange risk for resources from the IPC and allow users to cover the risk with the new facility. While many countries have some form of risk-sharing with the private sector, a system in which the Government assumes foreign exchange risk makes sense in the absence of any market mechanism for the private sector to cover its risk. It should be noted that even the full coverage of foreign exchange risk should not be construed as restricting the Government's exchange rate management policy. It just modifies and makes more transparent one component of the complex public-private resource movements that occur when the exchange rate adjusts.

6.11 With respect to supply-side constraints for the capital goods <sup>32/</sup> and construction sectors, the most frequently cited factor is again indirect foreign exchange requirements for intermediate inputs and equipment. This implies that measures designed to stimulate an investment recovery, including increased direct foreign exchange, should be accompanied by policies to relax these indirect requirements. If the Government adopts a phased approach to trade liberalization, it would be preferable to include the capital goods subsector early in any sequence of shifts from foreign exchange rationing to a system of tariff-based protection. Similar considerations apply to the construction sector.

6.12 These sectors also suffer from other constraints, though these are less obvious at present since most firms are not running at full capacity. For the capital goods subsector, skilled labor could become a problem in the event of rapid growth--early movement to maintain the quality and output of the system of technical education would be desirable here. It is also necessary that iron and steel policy ensures an adequate supply of quality steel products (that will often have to continue to be imported). In the construction sector, the main problem appears to be the scarcity of middle level management: blacks were excluded from managerial

---

<sup>32/</sup> The issues for the capital goods sector are discussed in the companion paper on this, see World Bank (1989).

positions prior to independence and the development of a cadre of experienced managers can take well over a decade. Little can be done in the short run: some liberalization of policy on expatriates may be justified, but this is generally a costly and unsatisfactory method of developing domestic experience and expertise. Continued pressure on the private sector to recruit, train and give responsibility to black Zimbabweans would be appropriate. In addition, for all sectors, a reduction in specific interventions associated with the existing regime of resource regulation can directly relieve the burden of working within the system; thereby freeing up all managers' time for production and marketing-related activities.

### C. Investment Appraisal

6.13 The third area of policy focus should be on facilitating the private sector's decision-making process over investment. The special issues for foreign investors are discussed below and we focus here on other aspects of investment regulation. The current investment committee approval system both restricts the private sector's autonomy and control over project evaluation and imposes an administrative cost on the Government. There are two ways of responding to this. First, the Government could streamline the approval system through clarifying and publicizing the criteria and giving decisions and handling appeals more quickly. Second, there could be a shift of some of the burden of project evaluation from government committees to financial institutions, utilizing the technical capability and skills that already exist in the financial system. The latter is advocated here: there has been little progress in streamlining investment decision-making in the past few years and such a shift would free up the time of Government officials in favor of a greater focus on strategic questions in industrial policy.

6.14 If project appraisal is to be shifted toward the financial system, its role as an allocator of foreign exchange would be extended. This would go beyond the relatively limited activities of ZDB and udc. This is closely related to the proposal in (B) above to undertake external borrowing for the purposes of private sector investment; this could be undertaken in the form of lines of credit for on-lending to private businesses. However, as noted in Chapter 5, such a shift would also need to take account on the Government's decision on any overall reform of the foreign exchange allocation system.

6.15 This leads to a more fundamental question of how to deal with government investment priorities in the event of some combination of a shift in appraisal to the financial system and, for example, movement to a tariff-based system of protection. Two approaches are recommended. First, it would be appropriate for large projects, of strategic significance to the country, to continue to be subject to specific government approval. This could be handled in the form of a cutoff in investment size below which specific approval would not be required. Second, government policy could continue to require some negative restrictions (e.g. on selected excluded areas) and positive biases (e.g. on regional policy and employment creation). The former could be handled by regulations that investment approvals would have to satisfy, backed by some monitoring of the approval



process. The alternative, of keeping a committee for final approval of a project, runs the major risk of maintaining the existing cumbersome system of approval. Positive biases are less easy to handle through microeconomic interventions (whoever handles the appraisal process). In the view of this paper it would be preferable to place greater reliance on indirect measures, for example through tax policy and a more pro-employment regulatory policy, to further these objectives.

#### D. Financial Sector Development

6.16 Despite the depth of the financial system, its role in investment finance has been limited. The problem does not lie with the financial sector's infrastructure--it has a wide range of institutions and a well-established capital market. But there are a number of symptoms of an insufficiently active role in investment: the stock market has experienced only a limited number of new issues since independence and appears to be substantially undervalued; the corporate bond market is undeveloped, and long-term corporate borrowing appears to be entirely limited to private placements; and the financial system as a whole has a predominant orientation toward financing "blue-chip" companies. If the financial sector is to play a larger role in investment appraisal and finance, there will be a need to encourage more venture capital activities (including the finance of new black entrepreneurs), risk-spreading techniques, a strengthening of the corporate side of the capital market, including the stock exchange, and a strengthening of the system's appraisal capability. The Government fully recognizes that the financial sector could play a more active role in the economy and is currently engaged in an internal review of the capital market and monetary policy.

6.17 Given the underlying strength of the financial system, its further development is likely to be most effectively encouraged through a combination of increased investment demand and allowing a relatively unrestricted response of the sector. The demand side is central: once the corporate sector places more demands on the system, new techniques and institutions will develop. The active response of the merchant banks to the financial opportunities presented by disinvestment in 1987-88 provides strong evidence for this. But some shaking up of the system would also be desirable: it is currently nicely protected and profitable and the Government could encourage the introduction of new techniques and institutions, rather than placing an overriding emphasis on the stability that leads to a sharing out of the substantial available profits from intermediation. This could also involve allowing new entrants into the system or diversification of existing institutions to put pressure on established institutions to move into areas of higher risk. This needs to be done with attention to the regulatory and monitoring capabilities of the system--in Kenya a rapid expansion in non-bank financial intermediaries in the early 1980s certainly took the sector into areas of longer-term credit and greater risk, but ran into problems with many of the new institutions having to close with bad debts. Greater initial regulation may have been justified.

6.18 If the Government shifts some of the burden of investment appraisal to the financial sector, it is recommended that this not be

restricted to a limited number of institutions (such as ZDB), since one of the purposes is to encourage competition and innovation on the financial side, involving both private and public institutions. However, ZDB, and public financial institutions in general, are likely to continue to have an important role to play. There are three reasons for this. First, project appraisal techniques in many financial institutions may be relatively weak and ZDB in particular could play a leading role in a transition phase. It may also be willing to finance economically sound, but relatively risky investments. Second, in view of the general perceived risks of doing business in Zimbabwe, private corporations may view participation of public sector finance, whether in the form of loans or equity, as a risk-spreading factor in a new investment. This should not, however, be a requirement, since many in the private sector appear to consider that public involvement increases rather than reduces risk. Third, attention needs to be given to encouragement of investment by black entrepreneurs, who may have not have an established track record. While it would be desirable for the private financial sector to take some initiative in this direction, it may initially be easier to encourage a public body, such as SEDCO, to take on the higher risks associated with new and smaller entrepreneurs.

6.19 The development of the stock exchange would also be facilitated by a general improvement in corporate investment demand. Government support for its future role in the economy would be desirable, to encourage a broader participation both from unlisted companies and potential investors. As noted earlier, there is substantial potential for capital appreciation if the volume of activity picks up. Consideration may also be given to two factors: the encouragement of investment in shares by small investors (once firms begin to make new issues), for example by according more generous tax treatment to dividends below a certain level; and the desirability of some institutional strengthening of the market Technical Assistance may be useful here.

6.20 Interest rate policy is, of course, relevant to the financial sector. Interest rates for corporations are not directly controlled, but they have been relatively low in real terms owing to weak credit demand. This is likely to change with a rise in credit demand from the corporate sector following an investment recovery. This would not be undesirable, if it reflects sustainable macroeconomic conditions and is not a consequence of an excessive budget deficit. As discussed in Chapter 3, the interest rate has only been a minor influence on the cost of capital in the past. Increases would hopefully be more than offset by reductions in perceived risks (thereby reducing the cost of equity finance) and in the relative price of capital goods following some relaxation of the foreign exchange restriction on imported capital goods. In view of the conclusion that other factors dominate the determination of investment demand, this paper is not too concerned about any dampening effect due to interest rate rises. Indeed an increased role for the financial sector in investment appraisal would be consistent with a greater role for interest rates in investment decision-making.

6.21 On the other hand, the Government's intervention to reduce interest rates on surplus funds of foreign-held corporations from ten to

five percent is not justified. The intention is understandable, to reduce the return on financial investments and thereby encourage firms to invest in physical assets. However, all the evidence indicates that low fixed investment by foreign companies is not due to attractive alternative domestic financial investments. The net result of the policy has been to transfer profits from the non-financial corporate sector to the financial institutions fortunate enough to have their deposits. The Government's decision to tax these windfall banking profits is justified in this light, but it would be preferable to remove the control over this interest rate: this would have beneficial effects on business confidence at no real cost to the country.

6.22 Finally, firms that use the new facility to cover foreign exchange risk will face higher charges on the finance of the foreign component of investment. This is likely to be substantially offset by the reduction in perceived risks, i.e., this is an example of an intervention that improves expected future profits, without having to raise current profits (it actually lowers them slightly).

#### E. Complementary Regulatory Issues

6.23 Two areas of regulation--job security regulation and price/wage setting--are probably of equal significance to investment regulation for private investment. Both tend to reduce investment, not through slowing the decision-making process, but through increasing the perceived risks of investment.

6.24 Job security regulation. <sup>33/</sup> The strong job security regulations (that require government approval for dismissal of employees) have two effects of relevance here. First, permanent labor becomes more like a fixed cost of production, that cannot be adjusted in the event of fluctuations or shortfalls in sales. This increases the probability of temporary or permanent declines in profitability and so increases the economic risks associated with an investment decision. Second, it increases the effective cost of labor, thereby encouraging investments that reduce labor use. Thus job security regulations tend to reduce overall investment and impart a labor-saving bias on the investment that does occur.

6.25 The experience since 1980 provides evidence for these effects in Zimbabwe. An econometric analysis indicates that labor demand was below what it would have been in the absence of the regulations for most industries. <sup>34/</sup> It also shows the strongest negative effect on employment in the more rapidly expanding subsectors, indicating relatively high

---

<sup>33/</sup> This was discussed in the 1987 CEM, and it has been further analyzed in follow-up work by Fallon and Lucas (1989).

<sup>34/</sup> *ibid.* This empirical work indicates that the long-run reduction in employment due to the regulations could be over 20 percent on average, compared to a situation without the regulations.

investment in those activities that were able to expand in a labor-saving direction, reducing the risks associated with the labor regulations. The objective of protecting the incomes of workers is desirable. However, it would be preferable to do this in ways that did not depress investment (that is necessary for any employment growth) nor imparted such strong incentives for labor-saving investments. Compensation schemes, for example based on the period of time working with a firm, combined with an active re-training policy, for example through courses for laid-off workers at the technical colleges, would be preferable.

6.26 It was announced in late 1988 that the Government, following consultations with both industry and union groups, is considering changes in the 1985 Labor Relations Act. This could involve a relaxation of the job security regulation and an extension of the currently highly restricted right to strike. This appears to reflect both the private sector's emphasis on the constraints imposed by the current restrictions and a possible shift in the stance of the Government vis-a-vis the labor movement to allow a greater role for unions.

6.27 Price and wage policy. The price freeze that was initiated in mid-1987 appears to have squeezed profits in many activities. However, the frequently voiced complaints of the corporate sector over price and wage controls are less compelling than other factors in explaining weak investment demand. If anything, the Government has managed price and wage policy since 1982 in a manner that tends to guarantee profits, through allowing cost increases to be passed on in prices--and, as the corporate financial results attest, with quite a healthy impact on profits at least until 1987. Nevertheless, there are compelling reasons for the continuation of both the unwinding of the price freeze and the complementary shift toward collective bargaining. First, this will allow the emergence of changes in relative prices and wage structures, encouraging resource movements in response to changing patterns of scarcity. As is well appreciated, this is closely associated with trade policy; it is best undertaken in the context of the introduction of foreign competition through a process of trade liberalization, given the widespread monopoly power of the corporate sector, should the Government decide to pursue this route. Second, it will reduce the costs imposed on both business and the Government of preparing, reviewing, negotiating and appealing price applications. At least in public statements, the private sector appears to consider that the price control system increases the risks of fluctuations in profits. Sudden decontrol may not be desirable, in view of widespread monopolistic markets and the risks of a jump in inflation. However, judging by the public debate of the past few years, even a gradual move would provide a valuable signal to the private sector in Zimbabwe and contribute to improved business confidence.

#### F. Tax Policy--Corporate Income Taxes and Indirect Taxes

6.28 Corporate tax policy. Major changes in corporate tax policy are not required. The quantitative analysis shows that the existing tax system is quite favorable to firms undertaking investment. In particular, the policy of full expensing for machinery and equipment leads to a sharp reduction in tax liabilities. Nevertheless, the following modifications

in tax policy are recommended for consideration.

(i) The major anomaly in the existing system is the coexistence of full expensing with interest deductibility for tax purposes. This, in effect, leads to giving a tax allowance twice on the same expenditure (when it is debt-financed) and is equivalent to a subsidy on investment. There is no case for this: it could lead to excessive investments in inefficient activities. The extent to which this has occurred in the past is likely to be small in view of the aversion of the corporate sector to debt finance. It is recommended, nevertheless, that interest deductibility be removed if full expensing is kept. This would tend to reduce after-tax profits (since firms do borrow for working capital purposes) and it would be appropriate to offset the projected additional projected revenue through a reduction (probably modest) in the average corporate tax rate. In view of the public visibility of the average rate, such a shift in tax structure could actually have a beneficial impact on business confidence.

(ii) The Tax Commission's recommendations on substituting full expensing with accelerated depreciation constitute an alternative approach, but are not compelling if taken in isolation: investment expensing is not intrinsically a distortionary form of tax allowance and review of this area may not be a priority for attention of the scarce time of Ministry of Finance officials. However, it should be noted that expensing is currently restricted to fixed assets, and would be expected to lead to excessive investment in fixed relative to other forms of capital. It would be appropriate to revisit this question if the Government undertakes a review of the fundamentals of the tax system i.e. whether to maintain the income-based character of the existing system (as essentially recommended by the Tax Commission) or shift to an expenditure-based approach. In this context, it should be noted that, since capital income is now weakly taxed, the tax system has already effectively moved in the direction of an expenditure-tested approach.

(iii) Some differentiation of tax allowance policy could be justified to further the Government's spatial location policy, through providing a more generous tax position for firms locating outside existing industrial centers.

(iv) There is little case for the use of taxes or subsidies as an instrument of foreign investment promotion. Low domestic profits have not been a feature of foreign corporations and the sources of lack of foreign investment lie elsewhere. This is discussed in the next section.

6.29 Indirect taxes. The recent trend in government policy has been to attempt to reduce the cost of investment through reduction in the cost of imported capital goods. In 1987, it was announced that the customs surtax on imported capital goods would be reduced from 20 to 15 percent. Then, in 1988, the possibility of full exemption on all indirect taxes was announced. At first sight, the results in Chapters 2 and 4 on the impact of the cost of investment goods on the cost of capital and the rate of investment would seem to provide support for this approach. However, there are three reasons why it is not advocated here. First, there is a question of interpretation: it is the judgement of this paper that the primary

source of the rise in the cost of investment goods lies in the direct and indirect impact of the rationing of foreign exchange--on the price of imported equipment and of domestically produced capital goods (for which price controls are relatively ineffective). The evidence is limited, but if this is correct, reducing tariffs will not have any effect of significance, while liberalization of supply would reduce the relative price. Second, we would place greater emphasis on other factors dampening investment demand--if we return to the analysis of the cost of capital, most importantly the factors that raise perceived risks, thereby raising the cost of equity. Third, reducing the tariff on imported capital goods whilst maintaining protection for the domestic capital goods industry has the perverse effect of encouraging relatively import-intensive investment choices (that would exacerbate the other bias toward capital-intensive choices due to the labor regulation system). The preferred choice would be to have uniform treatment by equalizing tariffs for competing and non-competing capital goods.

#### G. The Environment for Foreign Investment

6.30 The dominance of foreign capital in the corporate sector has been a pervasive feature of the assessment of the current investment climate. The Government has two distinct objectives vis-a-vis foreign capital: to increase national, and especially black, ownership of productive capital; and to encourage investment by existing and new foreign firms where there are clear gains to the economy. As discussed in Chapter 5, the development of an environment that furthers both objectives has been a difficult task. If this is to be successful, the key issue is a clear differentiation between those existing areas of foreign ownership that the Government would be happy to see diluted and areas where expansion is considered desirable. This complements the distinction drawn in Chapter 5 between those investors that have made a strategic decision to leave whenever they can get acceptable terms, and those with an established or potential long-term commitment to the economy. It is then important to ensure that policies designed to deal with the former group (including dividend and disinvestment policy) do not worsen the environment for potential new investors, through reduced expected returns and increasing perceived risks of investment.

6.31 The Government has indeed pursued a differentiated policy through according "venture capital" status to post-1979 investments: this, *inter alia*, has included the maintenance of 50 percent remittability of after-tax profits and more favorable provisions for disinvestment. However, this has failed to convince most new foreign investors or the parent companies of existing firms. There appear to be three reasons for this: first, foreign investment procedures remain both restrictive (e.g. on categories of investment by existing foreign firms that might qualify for venture capital status) and cumbersome; second, the perceived risks of investment are high--in part because the foreign investment community remains skeptical--this was captured in Chapter 4 by the unusually high cost of equity for foreign firms; third, many investment firms have made a strategic decision to minimize investments in Southern Africa. Nothing can be done about the last, but some further policy changes can facilitate the disinvestment process while improving the environment for new investment.

6.32 The environment for new investors. The principal feature of a differentiated policy should be a more favorable environment for potential new investors--and potential new investments of established firms. This appears to be the major focus of the Government's current review of the framework for foreign investment. The general conclusion that current profits (at least in Zimbabwe dollars) are not the key issue is important here. The emphasis of any new initiative should not be on any generalized fiscal incentives, but rather on stronger assurances on dividend remittability and disinvestment procedures for investment approval. The moves in the May 1987 package of measures were an initial step, but the more streamlining that should occur with the new investment centre is highly desirable. Finally, consideration should be given to the role of investment guarantee facilities, such as the Multilateral Investment Guarantee Agency. Zimbabwe's decision not to sign any such facility after independence is understandable, but it had an adverse impact on perceptions of foreign investors. Apart from the general signal this will give, such facilities can provide some comfort to potential investors on their key concern of maintaining access to dividends from their investment.

6.33 Improvement in the foreign investment regime is important, but high expectations on new inflows would be inappropriate, even with a highly favorable regime. The global shifts in the direction of international investment have been to the OECD and East Asian countries, driven by long-term perceptions over profitability and stability. By contrast, Africa in general, and Southern Africa in particular, is viewed as a region of high strategic risk. Add to this a widespread tendency in developing countries (from Mexico to Nigeria) to liberalize their foreign investment regimes and a rising interest in the implications of the planned internal liberalization of the EEC in 1992, and the prospects for generalized foreign investment inflows are not encouraging. The major benefits for Zimbabwe are likely to lie in the effects on the overall environment for private investment and in attracting selected foreign investment into specialized areas.

6.34 Managing disinvestment. Parts of the foreign investor community are willing to disinvest at apparent discounts of the order of 70 percent in return for repatriation of the proceeds over one to two years. The Government has allowed this to occur on a case-by-case basis in the past two of three years. This policy allows Zimbabwe to purchase productive capital at knock-down prices, as well as support the transfer to domestic groups (the transactions are reportedly only allowed if the purchasing group involves either substantial state or black participation). However, apart from the possibility of asset-stripping, it runs the risk of weakening the business environment through the perception that this represents a measure of the value of foreign capital in Zimbabwe, implying future expected returns should be similarly discounted. It is the view of this report that this is misleading: the substantial discounts are not a reflection of a discount on equity per se, but on the restrictions on capital outflows for the past three decades and the sharp discount on foreign currency transactions for a select group of foreign owners of capital. An additional factor is that increased state ownership can bring both direct costs and fears of pressures for future sales to the state.

6.35 It is recommended that the Government continue to allow disinvestment at a discount at an overall pace dictated by indicative aggregate external and financial programming, but that it explores somewhat different procedures. Two innovations could be considered. First, a division could be made between the domestic sale, which should be at a reasonable market price in domestic currency, and the foreign exchange transaction that would be at a discount. The level of the discount could be set by the Government, as at present, or it could be set in the market--since these transactions are already fully insulated from other foreign exchange transactions in the economy there are no risks of spillover into other areas. This approach would signal that the discounts do not derive from the low long-term value of capital stock, but the foreign exchange constraint and excess demand for capital outflows. It could be appropriate for the state (e.g. via the Reserve Bank) to be involved as an intermediary, capturing some of the substantial rents involved in the transactions. Second, it would be desirable to encourage a combination of established and new institutions to broaden local participation in the new domestic companies, wherever possible involving the Stock Exchange. This could also support the Government's other objective of encouraging a greater role for the capital market in the economy, especially if this is associated with measures to attract small investors into the exchange.

6.36 Swaps and new investments. To complement general policy on foreign investment, Government could also consider use of special mechanisms for swapping foreign-held assets in Zimbabwe for new investment. Classic debt-equity swaps would probably be undesirable--the Government has, at some cost, maintained its creditworthiness through a good record of servicing its debt; indications of value-impaired debt in the market could jeopardize this. However, schemes allowing discounted swaps of blocked funds, surplus funds, convertible bonds or existing equity for new foreign investment should avoid this problem--these categories of foreign liability have been effectively value-impaired for decades. In addition, there are two potentially important benefits that are entirely consistent with current policy toward foreign investment: first, swaps could support the change in the composition of foreign capital, from investors only interested in short-run profits and getting out on the least unfavorable terms, to investors with an interest in long-run profits and therefore in investing in Zimbabwe; and, second, they could attract foreign risk capital and expertise into areas that badly need it. As suggested in the May 1988 Conference of the Chamber of Mines, a good initial candidate for this would be gold exploration. This could be cast as a special case and the response to a scheme could be explored without commitment to a more generalized approach.



# Annex I Derivation of the Cost of Capital

1. This annex draws on the modern theory of optimal business investment behavior to derive an equation for the cost of capital services (rental price of capital) for the non-financial corporate sector of the Zimbabwean economy. The cost of capital services refers to the cost of using one unit of capital for a specified period of time, i.e., one year. It depends not only on the cost of funds and the cost of asset decay, but also on the benefits of tax provisions for businesses' depreciations and for deductibility of interest expenses. Also, the determination of the cost of capital relies on the interaction between inflation and taxes. To the extent that interest payments which are deductible against corporate income taxes are in part payments of the principal, the real cost of capital is reduced. This positive aspect of inflation is, however, often offset by the historical cost base depreciation rules, which do not fully compensate the companies for higher replacement cost of capital.

2. In Zimbabwe the current tax code allows for full expensing of business investment outlays. This allows, in essence, businesses to capitalize depreciation allowances to the maximum level, which is \$1 for each \$1 of new investment in machinery and equipment. Furthermore, interest payments are completely tax deductible. These provisions are quite important. Their influences are explicitly incorporated in the cost of capital derived below.

3. Analytically, the derivation of the cost of capital is facilitated by focusing on the investment decision from the perspective of the equity holder. Consider then an investment in a project costing  $P_k$  at the time of acquisition. If a proportion,  $b$ , of that investment is financed through debt, and if the statutory corporate income tax rate is  $u$ , the shareholder's share of the original investment outlays, will be  $(1-uz-b) P_k$ . For the project to be viable, this must be equal to the present value of the stream of  $rat$  income; more formally,

$$P_k(1-uz-b) = \int \exp(-(\rho + \delta)t) [(1-u)q.P_y - ((1-u)r + (\delta-x)) b. P_k + uzP_k] dt..1$$

where:  $q$  - real user cost of capital  
 $P_y$  - price of output  
 $\rho$  - required rate of return on equity (nominal)  
 $\delta$  - rate of depreciation  
 $r$  - nominal rate of interest  
 $x$  - rate of inflation  
 $z$  - present value of depreciation allowances

4. Solving equation (1) for the real cost of capital,  $q$ , yields:

$$q = \frac{P_k}{P_y} [(\hat{\rho} + \delta) \frac{1-uz}{1-u} - \frac{\hat{\rho} - (1-u)r + x}{1-u} .b] .....2$$

where  $\hat{\rho}$  is the real required rate of return on equity, i.e.

$$\hat{\rho} = \rho - \hat{p}_k$$

where  $\hat{p}_k$  is the rate of inflation in the price of capital goods.

5. Given that businesses in Zimbabwe are permitted to deduct fully their purchase of fixed assets against their current tax income,  $z$  will be equal to the ratio of total fixed assets to total capital i.e.,

$$a = \frac{\text{Fixed assets}}{\text{Fixed assets} + \text{Inventories}}$$

Thus, the final form for the real cost of capital will be:<sup>36/</sup>

$$q = \frac{P_k}{P_y} \left[ (\hat{\rho} + \delta) \frac{1-a}{1-u} \cdot \frac{\hat{\rho} - (1-u)r + x}{1-u} \cdot b \right]$$

6. This equation was applied to the Zimbabwean data, incorporating the following assumptions:

(i)  $\hat{\rho}$ , the real required return on equity taken to be 6 percent for local companies and 10 percent for foreign companies. For the local companies this estimate is consistent with the average (1980-87) return on their equity, after making adjustment for inflation-induced depreciation in the real value of debt. For foreign companies, an additional 4 percentage points of risk premium was added

(ii)  $\delta$ , economic depreciation assumed to be 5 percent.

<sup>36/</sup>  $z = az_1 + (1-a)z_2$

Where  $z_1$  and  $z_2$  are respectively the present value of depreciation allowances on fixed assets and on inventories. Under the prevailing SIA provision in Zimbabwe,  $z_1=1$  and  $z_2=0$ .

## References

- Abel, A. (1980), "Empirical Investment Equations: An Integrative Framework", in K. Brunner and A. Meltzer, eds; On the State of Macroeconomics, Carnegie-Rochester Conference Series on Public Policy, No. 12, pp. 39- 91.
- Brainard, W.C., J. B. Shoven and L. Weiss, (1980), "The Financial Valuation of the Return to Capital", Brookings Papers on Economic Activity, No. 2, pp 453-502.
- Chhibber, A., J. Cottani, R. Firuzabadi, M. Walton (1989), "Inflation, Price Controls and Fiscal Adjustment: the Case of Zimbabwe", PPR Working Paper No. 192, World Bank.
- Chelliah, R.J., et al (1986) Zimbabwe - Report of the Commission of Inquiry into Taxation, Harare.
- Cohn, R.A. and F. Modigliani, (1985), "Inflation and Corporate Financial Management", in E.I. Altman and M.C. Subrahmanyam, eds., Recent Advances in Corporate Finance, Richard Irwin, pp 341-370.
- Dailami, M. (1986), "Optimal Corporate Debt Financing and Real Investment Decisions Under Controlled Banking Systems", World Bank, DRD Discussion Paper, No. 204.
- De Angelo, H. and R. Masulis, (1980), "Optimal Capital Structure under Corporate and Personal Taxation", Journal of Financial Economics, March pp 3-29.
- Donaldson, G. (1961), Corporate Debt Capacity, Graduate School of Business Administration, Harvard University Press.
- Fallon, P., and R. Lucas, (1989) Job Security Regulations and the Dynamic Demand for Industrial Labor in India and Zimbabwe, mimeo, World Bank.
- Fazzari, S.M. and M.J. Athey (1987), "Asymmetric Information, Financing Constraints and Investment", The Review of Economics and Statistics, pp 481-487.
- Government of Zimbabwe (1986) Ministry of Finance, Economic Planning and Development, Socio-Economic Review of Zimbabwe, 1980-85
- Mayer, C., (1988), "New Issues in Corporate Finance", European Economic Review, N. 5, pp. 1167-1183.
- Myers, S.C. and Majluf, (1984), "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have", Journal of Financial Economics, 13, pp 187-221.
- Shapiro, M.D. (1986), "Investment, Output, and the Cost of Capital",

Brookings Papers on Economic Activity, pp 111-164.

Titman, S. and R. Wessels, (1988), "The Determinants of Capital Structure Choice," Journal of Finance, No. 1, pp. 1-19.

PPR Working Paper Series

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS218 Public Finance, Trade and Development: The Chilean Experience	Vittorio Corbo	July 1989	A. Oropesa 61758
WPS219 Rural Credit in Developing Countries	Avishay Braverman J. Luis Guasch	June 1989	C. Spooner 37570
WPS220 Capacity Building for Policy Analysis	Samuel Paul David Steedman Francis X. Sutton	July 1989	E. Madrona 61712
WPS221 How Does Uncertainty About the Real Exchange Rate Affect Exports?	Ricardo J. Caballero Vittorio Corbo	June 1989	A. Oropesa 61758
WPS222 Why Stabilisation Policies in Zambia Did Not Succeed	Christopher Colclough		
WPS223 Overvalued and Undervalued Exchange Rates in An Equilibrium Optimizing Model	Jose Saul Lizondo		
WPS224 The Economics of the Government Budget Constraint	Stanley Fischer	May 1989	S. Fischer 33774
WPS225 Targeting Assistance to the Poor: Using Household Survey Data	Paul Glewwe Oussama Kanaan	June 1989	B. Rosa 33751
WPS226 Inflation and the Costs of Stabilization: Historical Cases, Recent Experiences and Policy Lessons	Andres Solimano		
WPS227 Institutional Reforms in Sector Adjustment Operations	Samuel Paul		
WPS228 Economic Performance of Developing Countries in the 1980s	Robert Lynn F. Desmond McCarthy		
WPS229 The Effect of Demographic Changes on Saving for Life-Cycle Motives in Developing Countries	Steven B. Webb Heidi Zia	July 1989	E. Khine 61765
WPS230 Unemployment, Migration and Wages in Turkey, 1962-1985	Bent Hansen	July 1989	J. Timmins 39248
WPS231 The World Bank Revised Minimum Standard Model	Doug Addison	May 1989	J. Onwuemene- Kocha
WPS232 Women and Food Security in Kenya	Nadine R. Horenstein	June 1989	M. Villar 33752
WPS233 Public Enterprise Reform in Adjustment Lending	John Nellis	August 1989	R. Malcolm 61708

PPR Working Paper Series

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS236 Education and Earnings in Peru's Informal Nonfarm Family Enterprises	Peter Mook Philip Musgrove Morton Stelcner	July 1989	M. Fisher 34819
WPS237 The Curricular Content of Primary Education in Developing Countries	Aaron Benavot David Kamens	June 1989	C. Cristobal 33640
WPS238 The Distributional Consequences of a Tax Reform on a VAT for Pakistan	Ehtisham Ahmad Stephen Ludlow		
WPS239 The Choice Between Unilateral and Multi-lateral Trade Liberalization Strategies	Julio Nogues	July 1989	S. Torrijos 33709
WPS240 The Public Role in Private Post-Secondary Education: A Review of Issues and Options	Ake Blomqvist Emmanuel Jimenez		
WPS241 The Effect of Job Training on Peruvian Women's Employment and Wages	Ana-Maria Arriagada	July 1989	C. Cristobal 33640
WPS242 A Multi-Level Model of School Effectiveness in a Developing Country	Marlaine Lockheed Nicholas Longford		
WPS243 Averting Financial Crisis - Kuwait	Fawzi Hamad Al-Sultan		
WPS244 Do Caribbean Exporters Pay Higher Freight Costs?	Alexander Yeats	July 1989	J. Epps 33710
WPS245 Developing a Partnership of indigenous Peoples, Conservationists, and Land Use Planners in Latin America	Peter Poole	August 1989	S. Davis 38622
WPS246 Causes of Adult Deaths in Developing Countries: A Review of Data and Methods	Richard Hayes Thierry Mertens Geraldine Lockett Laura Rodrigues	July 1989	S. Ainsworth 31091
WPS247 Macroeconomic Policies for Structural Adjustment	Carlos A. Rodriguez		
WPS248 Private Investment, Government Policy and Foreign Capital in Zimbabwe	Mansoor Dailami Michael Walton	August 1989	M. Raggambi 61696